THE RUBBER AGE AND TIRE NEWS

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INDEX TO CONTENTS

American Rubber Products Are Offered to the World 255
Financing Exports and Imports..... 260
European Market for Reclaimed Rubber..... 261
Versatility of Export Associations in Foreign Trade 262
Essentials of Foreign Trade..... 265
Editorials 267
Happenings of Interest to the Rubber Men.... 268
TIRE NEWS:
Proposed British Tire Standards..... 269
Happenings of Interest to Tire Men..... 274
MARKETS:
Manufactured Rubber Goods..... 275
Cotton, Yarn and Fabrics..... 275
Chemicals and Compounding Materials..... 276
Crude Rubber 277
Scrap Rubber 277

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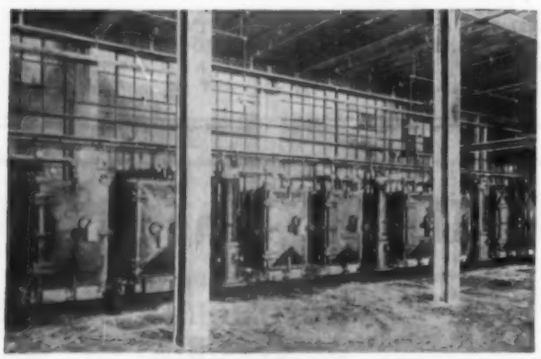

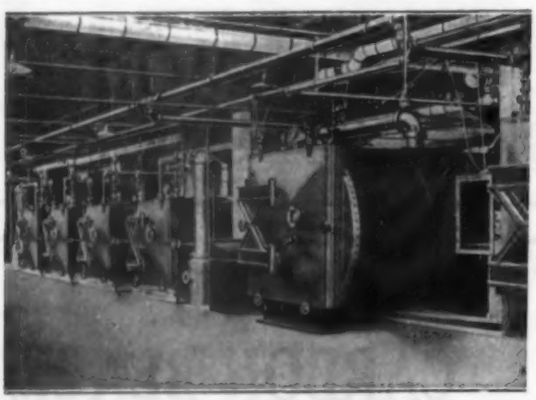

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THE RUBBER AGE AND TIRE NEWS

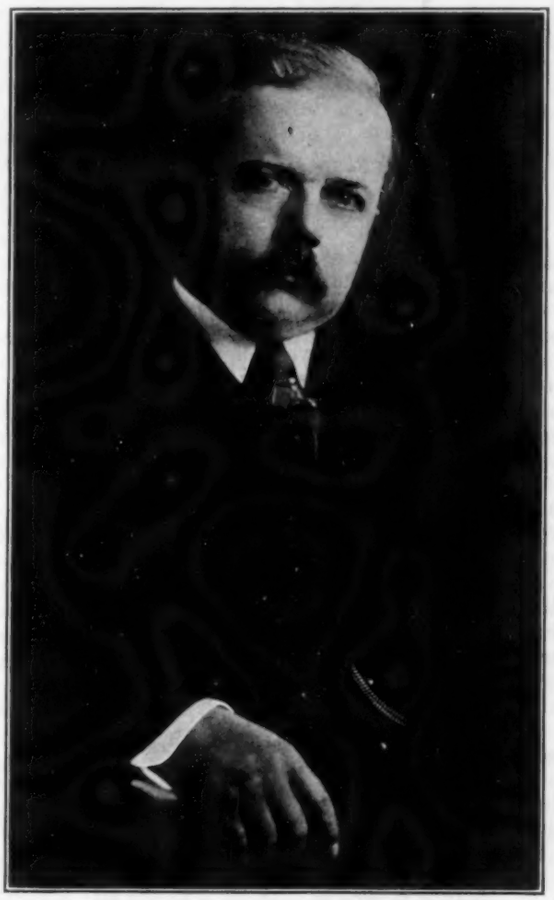
American Rubber Products Are Offered to the World

The time is at hand when the American rubber manufacturer will have the opportunity to test the high hopes he has long expressed of building up a permanent foreign trade. The next year should bring a clear indication of whether the United States shall take a foremost place among the great exporters of rubber products of the world or whether it shall slip back into the situation which prevailed prior to 1914.

Probably the most significant factor in the entire situation is the altered attitude of the American rubber manufacturer toward international commerce.

Four years ago only a few American rubber companies were definitely interested in foreign trade. Today there are scarcely any members of this industry who have not been seized with a desire to discover the possibilities of foreign markets. The war has given the industry a definite taste of export business. The manufacturers are now definitely interested in maintaining this vast outlet for their products.

To indicate the present attitude of the American rubber industry with regard to world trade. THE RUBBER AGE AND TIRE NEWS is here publishing a number of brief articles and expressions of opinion contributed by some of the leaders of this large manufacturing industry:



FRANK A. SEIBERLING

Future of American Rubber Goods in Foreign Markets

BY FRANK A. SEIBERLING
Goodyear Tire and Rubber Company

There is plenty of evidence that the market for rubber products throughout the world is an assured one. Motor transportation is an absolute necessity, and just as it has expanded and developed a market for rubber goods in the United States, so is it sure to expand and develop a market for rubber goods in all parts of the world, where civilization finds foothold.

In addition to the market made available by the development of motor transportation, there are the industrial and agricultural fields of the world, among whose requirements are mechanical rubber goods, such as conveyor belting, transmission belting, water, steam and chemical hose and various types of packing.

Nor should we forget, in listing these available markets, the vast opportunity for the sale of shoe soles and heels.

So to our minds there is scarcely any need for proof that the future of the rubber business in the export field is as obviously assured as it is in the United States.

There is, however, an issue of vital importance which must be taken into consideration by all American rubber manufacturers in contemplating their particular opportunities for development in the foreign field. This vital issue is the manner and the method that the American manufacturer proposes to adopt in order to retain the foreign customers which he has acquired during the past four years. We will explain just what we mean by this statement.

It is a lamentable fact that up to the beginning of the great war the American manufacturer treated export trade more or less as a stepchild. Orders from foreign buyers were filled provided the convenience of the manufacturer so dictated, otherwise the domestic buyer was given all the attention, and the foreign order was placed in the file of last consideration.

Contrarily, European manufacturers in Great Britain, Germany and France paid particular attention to the export trade, and have built up banking and shipping facilities in order to give the foreign buyer the best possible service.

The European war disrupted this service of the European manufacturer, and during the period of the war a great number of the foreign buyers had to switch their purchases to the United States, and it is an encouraging fact that upon this influx of foreign trade, which was virtually handed to us on a silver plat-

ter, the American manufacturers woke up to the possibilities that had been neglected in the past.

Particularly has the rubber industry of the United States recognized the opportunities opened to us in the foreign field. American rubber manufacturers, for the past few years and at the present time, are making a specialized study of the foreign market for rubber goods and there is no question but that buyers in foreign fields will rapidly come to realize that it will be to their benefit to make connections with American manufacturers.

One of the greatest assets to the development of the rubber business in the foreign field is that of shipping facilities.

Up to the Civil War the United States dominated the high seas with its merchant marine. From the Civil War up to the European War, the United States held a lamentably meagre position as a world sea power. Since four years ago, again the United States has jumped to a place perhaps second only to Great Britain with its merchant marine.

These ships are now rapidly becoming available for world trade. Thus, with ships available for transportation coupled with the great development of factory buildings and producing plants in the rubber industry in the United States, the foreign buyer is sure to receive his goods more promptly and in better order than has been the case heretofore.

Quality should be the first consideration in the manufacture of rubber goods for export. There is no argument necessary to prove that American tires and mechanical rubber goods are unsurpassed in quality. This, coupled with the American ability to turn out quality products at low prices because of large production, placed the American manufacturer in a splendid position to lay before the foreign buyer a decidedly profitable proposition.

It must be remembered that there are more automobiles in the United States than in all of the rest of the world combined. The industry has reached a point of tremendous development in the standardization of quality and manufacturing costs.

These assets necessarily will show up to advantage as the American manufacturer enters the export market with his proposition for the foreign buyer.

There is, furthermore, the big advantage which American manufacturers will have in placing their branches throughout the world wherever the market offers any possibilities. Already these branches and factories are being established in foreign territories.

American motor trucks and passenger cars are being shipped to foreign fields in large numbers, and these exports of motor vehicles will continue in much larger quantities. It is natural that rubber supplies from the same producing country will follow these motor vehicles. Thus, wherever American motor cars are sold, American tires will be found in available quantities.

We should not fail to emphasize the importance of reducing delivery costs to the lowest point. It will be the policy of this company to eliminate every dollar of delivery costs that can be eliminated in carrying a tire or any other rubber product from the factory to the user, whether he be in the West Indies or far off Japan.

I believe the American manufacturer has, with his large production and efficient sales organization, an enviable opportunity to deliver goods to the foreign buyer at the lowest possible cost of delivery.

So in summing up the reasons why the foreign buyer should continue to patronize American exporters of rubber products, we would say:

First, that a quality product will be assured; that methods of distribution will be established in such a manner as to reduce the cost of delivery to its lowest figure—at the present time shipping facilities as represented in our merchant marine insure prompt delivery and sufficient stocks carried in all foreign territories of importance; and last, but not by any means least, the rapidly improving facilities of American banking institutions to take care of American exporters and buyers in the foreign fields.

Optimistic as to Future

By Edward H. Huxley

United States Rubber Export Company

Why should foreign buyers continue to patronize American exporters of rubber products? Obviously they should not so continue unless it is clearly to their advantage, and the problem confronting the exporter is, therefore, that of making it to the advantage of the foreign buyer to continue business relations.

The American exporter has, first, the advantage of possession, for he has largely monopolized the export business of the world. If he has handled this business in a way to earn the gratitude and friendship of his customer, he will retain it if he can offer his products of equal quality at an equal price. His ability to do this is partly within his own control and partly beyond his control. He must manufacture his goods so that they may be offered on a strictly competitive basis as to price and quality. To do this, he must have competitive labor and competitive raw materials. If he is at a disadvantage as to either of these, he must either overcome that disadvantage by more successful manufacturing methods or he cnanot expect to hold and develop his export trade. He may be aided by the Government in the matter of shipping facilities and rates and it is to be hoped that a wise and far-sighted policy will be adopted for our merchant marine. It is obvious that every feature of the complicated system of manufacturing and delivering merchandise to foreign countries must be competitive, or nearly so, if success is to come. The American manufacturer clearly excels in organization and skill of manufacture, and a considerable disadvantage in the comparison of wages may be overcome by superior methods in fact, the history of export before the war indicates clearly that there must have been some such result, for many American manufacturers have successfully competed for foreign trade against the European manufacturer who had a decided advantage in rates of wages.

Personally, I am thoroughly optimistic as to the future for the American exporter of rubber products. America has always led the world in manufactures of rubber, and having the lead, should not find it impossible to extend it abroad. The manufacturer can, however, be greatly aided or retarded by a wise Government policy which puts at his disposal equality of wages, equality of raw materials and, particularly, equality of shipping facilities and rates. With this policy—and there appears to be no reason to doubt that it will come—the American exporter of rubber goods should lead abroad in no less a degree than he does at home.

Future of Rubber Exporting Assured

By Jacob Pfeiffer

Miller Rubber Company

Wish to commend you for making a special effort along the export line which should have great support from all industries and a united effort to have laws passed which will put us on an equality with the other great maritime nations.

The future of American rubber goods in foreign markets rests largely on the acquisition by the United States of an American owned Merchant Marine of a size adequate to compete on an equal basis with the Merchant Marine of other nations. To make the most of our export opportunities, we must have equal shipping rights and all the service neces-

A Mill Room of the B. F. Goodrich Co., American Factory

sary for the successful operation of great shipping fleets.

A splendid step has been taken in the right direction by the action of the Federal Reserve Bank in establishing foreign banks. Already many of the branch banks on foreign soil are rendering valuable service and this is the kind of cooperation that really helps the American people.

With an adequate Merchant Marine, a proper system of foreign banking connection, and similar cooperation in other ways, the American manufacturers of rubber goods would face record-breaking export business.

Most certainly, foreign buyers will continue to patronize the American exporters of rubber products. And that is as it should be. The manufacture of rubber goods is strictly an American industry. It started here, was developed here and we use 65 per cent of the world's crude rubber. Because of our long experience in developing the rubber industry, we understand it better than anyone else.

The American manufacturer's extensive knowledge of the rubber business has been a leading factor in making it one of the country's largest industries. Foreign buyers have long recognized this fact and they are constantly coming here for their requirements.

With all this in view, there is no question about the future of American rubber goods in foreign markets. When properly supported in a shipping and legislative way—it is bound to surpass all previous records.

Some Reasons Why

By W. O'Neil

The General Tire and Rubber Company

There are a great many reasons why the American manufacturer is peculiarly fitted to obtain a share of the world's business on tires.

In the first place, our factories in this country manufacturing tires are much larger and have a much larger output than any of our European competitors. There are more pneumatic tires used in two states in the United States than in all the rest of the world combined. On account of the large output the rubber factories here have developed a great many labor saving devices, which tend to equalize the lower labor costs of the foreign factories.

Secondly, a great many American tires have been going to South America and Europe with the rubber non-skid design. Now that it has been introduced into South America it will remain popular.

We have noticed a big difference in the export demand for non-skid tires over two years ago. At first almost the entire demand was for plain tread tires. This has changed almost as radically as it has changed for domestic purposes, so that now only ten per cent of our tires, even for export, are being shipped in the plain tread design.

Another reason why American tires should continue in great demand is due to the fact that we have been shipping a great many straight-side tires. Only a few European manufacturers make straight side tires. This type of tire is driving every other tire off the American market. It is proving the most satisfactory. We do not see any reason why it should not demonstrate its same superiority over the old fashioned clincher tire of the foreign market.

Then again, a great many American cars with American size rims have been shipped for export during the last three years. These cars came supplied with American tires and the superiority of our product will thus be demonstrated. European tires will not give the service on the higher power American cars. (American sizes not made by foreign makers—will require a rim change to get away from us).

The European car is not designed with a power plant which will enable it to take almost any hill on high gear, consequently, it does not demand so much of the tires. Our tires are built to withstand this severe strain.

America is now the tire market of the world. We see little reason why it should not continue so.

Rubber Sundries View

By Thomas W. Miller

The Faultless Rubber Company

On lines with which we are familiar, such as druggist, surgical and medical rubber goods, we believe that due to the superior quality of the product of American manufacturers and the opportunity existing to replace merchandise heretofore supplied by Germany, prospects for the immediate future at least are very good.

Eventually much depends on adjustments that are bound to follow the treaty of peace, on banking and shipping facilities, and the willingness of American manufacturers to co-operate and to give careful and favorable consideration to the things that in the past have operated against them.

Energy Shown Gives Confidence

By D. M. Mason

Mason Tire and Rubber Company

It is our belief that the present energy being shown by the American manufacturers with reference to export business, particularly tire business, is going to result in complete American domination of foreign markets. The low cost of production in American pneumatic and solid tire plants, by reason of efficiency and immense output, will result, we believe, in American manufacturers securing the bulk of available foreign business. This is not going to come, however, without careful planning and the expenditure of much energy, as well as the overcoming of such prejudices as exist in some countries owing to the past lack of appreciation on the part of American manufacturers of foreign business, as demonstrated through the careless handling of shipments, poor packing, etc.

It seems to us that any manufacturer who will make a careful, analytical study of export requirements, and give the question the time and attention it demands in the opening up of original territory, can secure considerable foreign business. There is no country in the world whose rubber manufacturers can compete with us on price.

War Was Great Opportunity

By M. E. Mason

The Mohawk Rubber Company

The war has undoubtedly given the American manufacturers an opportunity to get their goods started in many markets where it was almost impossible to obtain business previously. In the automobile tire line particularly, the shipment of American made cars equipped with American rims and tires and the complete absence of foreign make cars from these markets for something like four years, has probably done more toward establishing a market for American made tires than could otherwise be accomplished in many years.

In some of the countries, particularly the European countries which under normal conditions, manufacture practically all of their own needs in the rubber line and have some left over to export, it is not likely that the demand for rubber goods manufactured in this country will last beyond the period of reconstruction. In other sections of the world however, such as South America, where European cars and tires have been largely used, a demand has been established and with a reasonable amount of nursing will undoubtedly continue to grow.

Taken as a whole, the outlook for the exportation of American rubber goods is much better than it has been at any time previously.

Had the Government seen fit to exclude tires for export from the restrictions which were placed upon the tire industry during the last few months it would have tended to encourage the exportation of tires largely. Many manufacturers with insufficient production to take care of their domestic trade naturally made no attempt to develop foreign trade during these months of restricted production.

Some Pertinent Points

By Pablo Homs

Sterling Tire Corporation

Export business is essentially very little different from domestic business. The biggest element in either one is common sense. This has become axiomatic to such an extent that many American manufacturers have been led to believe that practically anyone in his organization who has been successful in handling domestic business matters could as easily secure the desired results in the foreign field.

The success of a salesman anywhere is due to his intimate knowledge of the people with whom he does business, of their habits and their virtues, their desires and their needs. It goes without saying that to these qualifications, he must add a knowledge of the goods he is handling and a considerable amount of sympathy with the ideas and ideals of his clientele.

To secure these qualifications the export manager must combine study and travel, which naturally develop his powers of observation, broaden his vision, and show him plainly new applications and possibilities for the marketing of his products.

The American manufacturer has now an excellent opportunity to enter and cultivate for his products immense markets that previous to the war were not so approachable.

Rubber and tire manufacturers have shown in a few years, and against quite a number of obstacles, what can be done in the way of sales abroad, although this country is not blessed with any of the important raw materials entering into the production of rubber goods. Our exports last year show nearly $35,000,000 worth of tires and rubber goods exported by American manufacturers. This is more than the combined amount of passenger and commercial cars and automobile parts, exported during the year previous to the European war. Naturally, automobile tires form a very large part of this immense export business, which was due in a great measure at the beginning to the reputation acquired by the American automobiles abroad, equipped with American made tires.

More and more automobile and tire dealers abroad have increased their respect for American made tires, and where a few years ago most American cars after using the original tire equipment were replaced by French or English tires, it is now quite common to see European cars abroad equipped with our product.

The tire and rubber business in Foreign Countries should be maintained exclusively on the basis of the highest possible quality, good faith between manufacturer and dealer, and the same application of the golden rule that is so prominent in the business life of this country.

Importance of Service

By T. E. Titus

The B. F. Goodrich Company

From the viewpoint of the manufacturer the reasons are obvious. The American manufacturer has striven to develop and maintain a standard of quality of a dependable nature.

The development in our foreign trade has given us a keener insight into the problems of the foreign customer. The integrity of the American manufacturer, coupled with this better understanding and a full realization of the necessity of service warrants not only a continuation of previous business relations, but a material expansion.

American Rubber to Be Favored

By T. A. Dwyer

The Brunswick-Balke-Collender Company

The Brunswick-Balke-Collender Company, famous the world over for their billiard tables and bowling

alleys, and coming to the front with a rush as tire and hard rubber manufacturers are firmly convinced that American made rubber goods will be in immediate and great demand in all foreign countries. The first and foremost reason why, is that Uncle Sam's Army and Navy and the American commonwealth back of them have endeared themselves to all peoples believing in justice and fair play, which cannot help but add immensely to the prestige of American made goods.

In the course of time the scramble for commercial supremacy with the intense competition that will be engendered may crowd sentiment into the background, and producers of this country will be confronted with the resurrected adage that "Business is Business." Until then we Americans have practically a free field and with the friends that we make through honest goods and good service, we have nothing to fear when the competitive crisis is reached.

American manufacturers have been accused heretofore of indifference to what the foreign buyer wanted in the shape of goods, service and financial assistance, but with the ambitious program in the way of investigations, commercial explorations, credit arrangements and advertising that is being enthusiastically launched by American manufacturers and banking institutions, all backed up by the American merchant marine that is fast assuming unexampled proportions, there should not be cause for future complaints about indifference to requirements of foreign markets and the best methods of meeting them.

Then there is the Webb-Pomerene Act that enables groups of American exporters to combine and to more intensely and thoroughly exploit overseas trade. Germany has had the reputation for efficiency in many ways, chief among which was its dominance in foreign business. When the plans of the manufacturers and exporters of the U. S. A. are both fully matured and in effective operation, German efficiency at its height will have been but academic in comparison.

Immediate reasons why foreign buyers should patronize American exporters of rubber products are: First, we have large stocks of crude rubber, fabric, metal, etc., immediately available, our factory organizations are rapidly becoming normal, our machinery is the most modern in the world, our artisans are acknowledged to be the most skillful, our transportation facilities are vastly superior to those of any other country thus insuring quicker shipments, and the American merchant is becoming more liberal in the matter of extending credit on generous terms.

Should Continue to Patronize America

By John B. Maus
The Fisk Rubber Company

The conclusion of practically 15,000 miles of travel, through South America, visiting practically all of the countries south of the Canal, has left on me a remarkable impression of the purchasing power of approximately sixty millions of people, the greater portion of whom use rubber goods of some kind in their homes and factories.

Prosperity has blessed these countries because of the tremendous shipments of nitrates, rubber, lead, zinc, etc., as well as food products, wheat and meat, which were shipped extensively to the Allies during the great war. In consequence of this, most of these countries are able to buy generously, and it is my impression, are extremely favorable to the United States, principally because of its location in America, its broad world policies, its physical and mental strength and determined effort for fair play for the peoples of the world; last but not least, its proven method of reciprocity and justice in commercial matters.

The United States has no desire or design to use its power or wealth for any purpose other than beneficial to the general welfare of mankind.

The United States has fought determinately for the protection, perpetuation and progress of the democratic principles upon which its great republic is founded.

The United States will not discriminate economically or otherwise between nations (regardless of their size) that respect and observe the principles; that the humblest citizens thereof possess the inalienable rights of life, liberty and the pursuit of happiness, because from such citizens the Government derives its just powers and its commercial policies are aimed to travel similar channels.

The Great War has taught us economy, brought about standardization, the elimination of waste and has sharpened our intellect to manufacture quality goods for reasonable profit. It has rebuilt our merchant marine, has given us plenty of ships, and has taught us our geography in such a way that by personal contact we have learned to know the Latin people as we will know the other peoples of the world. They in turn have learned to know us. They are satisfied that we, although not as old a nation as their own, are, so to speak, on the square, which means everything in modern commercialism. They have also learned that we, after all, are quite human and are striving for a friendly commercial relationship that collectively will make the western hemisphere alone one grand family.

Auto tires is an infinitesimal part of rubber to be sold. Because of the lack of roads there will hardly be the traveling by automobile that there is in the United States. However, speaking principally of South America, large quantities of belting, packing, hose, dipped goods and druggists's sundries would find a large market.

We have learned that it is necessar to send trained men, who not only speak the native tongue, but men who are intelligent, diplomatic, gentle and above all, men who are honest, who love humanity, which know no creed, but is just and honest in all his negotiations.

By a constant co-operation of the business interests, exporting as well as importing, he can create a link in the chain of commerce that will be inseparably welded.

Prompt Action Is Essential

By Thomas F. Walsh
Swinehart Tire and Rubber Company

We are optimistic over the outlook that the foreign market offers American manufacturers. It will be a long time before European manufacturers will be in position to offer aggressive competition in the South American and Far East countries.

Germany, the only nation whose manufacturing facilities are intact, has domestic troubles that will require months to settle.

President Wilson's wise handling of the Mexican situation and his attitude on European questions has done much to remove the prejudice heretofore held regarding our attitude as one of aggression, greed and avarice.

The hopeful outlook for shipping facilities places us in a very favorable position to push aggressively foreign trade and offers a market to take care of the over-production brought about by the demand for war necessities.

Prompt effort on our part now should place us in such a position that when open competition comes we can hold our own effectively, providing we are wise enough to prepare ourselves for this competition by the production and marketing of an article of merit that will carry prestige with it.

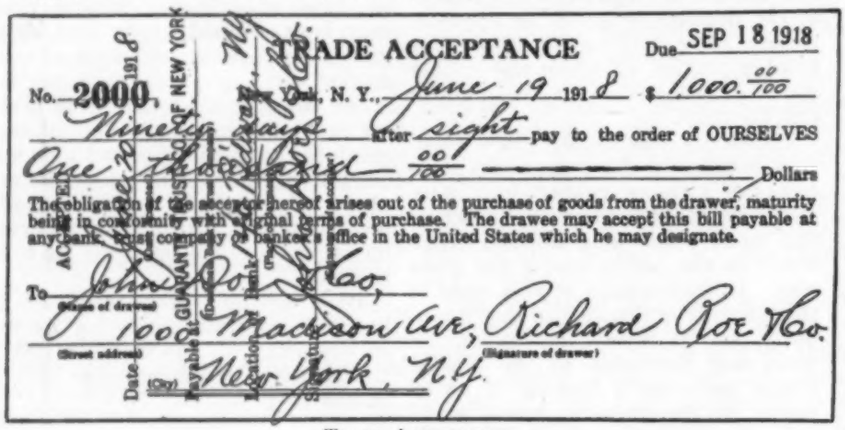
Quality ought to be our watchword, and we can never hope to hold these markets by the attempt to force on them at this time an inferior article.

Financing Exports and Imports

By W. G. Avery

Assistant Treasurer, Guaranty Trust Company of New York

The financing of imports and exports by means of acceptances is usually accomplished in two ways; first, by the opening of commercial credits, which authorize the bank through whom they are opened to accept and negotiate the drafts of the shipper on such bank; and, second, of exchange of which the acceptor is a bank or trust company, or a firm, person, company, or corporation engaged in the business of granting bankers' acceptance credits." In other words, a bank acceptance consists of the extension of the bank's credit to a customer, wherein the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No. 2000, New York, N. Y., June 19 1918 $ 1000.00/100

Ninety days after sight pay to the order of OURSELVES

One thousand 00/100 Dollars

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To John Doe & Co.,

(Name of drawee)

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(Street address) (Signature of drawer)

(City) New York, N.Y.

Date

Payable at GUARANTY TRUST CO. OF NEW YORK

ACCEPTED

Trade Acceptance

by the importer providing the exporter in the contract with the name of the bank abroad on whom he may draw.

Bills drawn direct by the seller on the buyer, covering imports or exports, can hardly be placed in the same class as domestic trade acceptances, and are not so freely traded in.

For the purposes of this article, it will be best to judge the merits of the three methods.

In the first case, the opening of commercial credits, the seller's reimbursement and his bank's acceptance of his drafts are fully guaranteed by the importer's bank, which renders the bills most desirable paper. The documents covering the merchandise are, of course, forwarded by the accepting bank to the one opening the credit. The bills so accepted are then domestic bankers' acceptances, and as such command a very ready market.

The second method mentioned, the importer providing the exporter with the name of the bank on which he may draw, creates what are known as foreign exchange bills, or bankers' bills. They are drawn in the currency of the importing country and have the relative documents, such as bills of lading, insurance, invoices, etc., attached. They are purchased from the drawer at the market rates of exchange, and are then forwarded by the purchasing bank for acceptance to the bank designated thereon.

A bankers' acceptance is defined by the Federal Reserve Board as "a bill bank, for a consideration, permits the customer to use the bank's credit. This credit may be either secured or unsecured, depending upon the business, character, and financial responsibility of the applicant.

According to an opinion of the counsel of the Federal Reserve Board, when a member bank of the Federal Reserve System accepts a draft or bill of exchange drawn against it, it enters into a contract substantially similar to that of the maker of a note, so that while the form of the instrument differs, the legal effect is the same. The use of a bank's acceptance, however, differs from the use of its promissory note. When a bank accepts a draft or bill of exchange for one of its customers, it merely lends its credit responsibility to its customer in order that he may procure the funds elsewhere. The holder of a bank's acceptance has the same legal rights against the bank as the holder of its promissory note.

Bank acceptances offer certain distinct advantages, not only to merchants but also to the banks through which they deal. The specific advantages may be summarized as follows:

The use of acceptances makes it possible for trust companies and banks to finance legitimate business transactions of their customers properly and conveniently.

Banks having surplus money which cannot readily be employed at the time can invest it in prime acceptances which can either be held until maturity or sold in the open market, should such action be necessary.

Because of their ready marketability, acceptances of well-known institutions will be sought more and more as short-term investments and will be especially valuable as such.

At this time, when plans for fostering and building up our foreign trade are being formulated, the advantages of the adoption of the acceptance in foreign transactions is of special importance.

Exporters who have desired to enter into foreign trade have experienced much difficulty in their inability to grant as good terms of credit as have been accorded foreign buyers by competitors abroad. It has been the practice of many American exporters to require payment in cash at New York against documents, and the foreign trade of this country has thus been handicapped. This difficulty may be overcome by the use of bank acceptances, as the credit which is required for the goods may be established by drawing at sixty or ninety days' sight on a New York accepting bank or trust company, the acceptance being discounted at an agreed fixed rate.

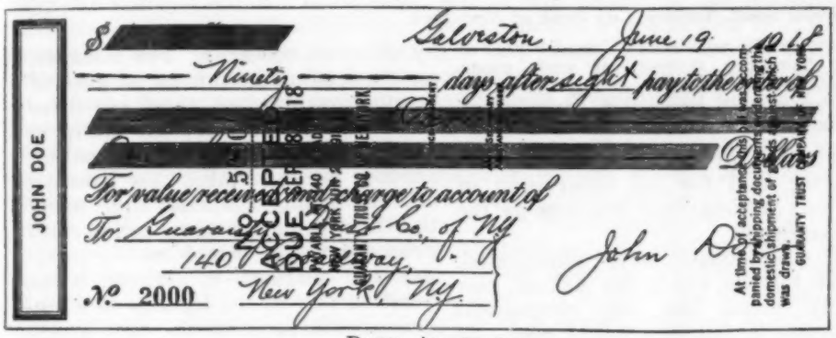
Another advantage to the exporter is that he is immediately reimbursed for the value of his products or merchandise and, instead of having his capital tied up in credits, it is released for re-employment in new business.

Acceptances, based principally on the commodities exported from this country, form a valuable security. This was particularly evidenced in London at the outbreak of the war, when acceptances amounting to more than £500,000,000 were in circulation. The greater part of these were subsequently liquidated by the "self-liquidating" process; that is, by the sale of the commodity which formed the basis of the transaction, thus proving the soundness of the accepting business in general.

Some confusion has arisen as to the difference between trade acceptances and bankers' acceptances. The former is the result of a transaction between the buyer and seller; the latter the result of the granting of credit by a banker. In the former case, it is the buyer who accepts the draft; in the latter it is the bank.

In regard to drafts drawn on the buyer of goods abroad, it is evident that there cannot be the same security as on the two kinds previously mentioned. As it is essential to the buyer

to obtain his documents in order to get delivery of the goods, they must be released to him when he accepts the relative draft, therefore, the security is taken out of the control of the holder. The result of this is that the risk devolves solely upon the names of the maker and acceptor, which in the case of a foreign acceptor other than a bank, is too indefinite to make the paper a desirable purchase.


JOHN DOE
Galveston, June 19 1918
Ninety days after sight pay to the order of
For value received and charge to account of
To Guaranty Trust Co. of N.Y.
140 Broadway.
New York, N.Y.
No. 2000
John Doe

BANK ACCEPTANCE

Knowledge of the moral and financial responsibility of the acceptor is not sufficiently available in the majority of cases, owing to the distance and time necessary to obtain the desired information.

It has not hitherto been the custom in this country to discount even domestic trade bills before acceptance, though it is done to a large extent in Canada. With these, however, it is easier to obtain information on the names submitted and this is invariably done by bankers when considering the purchase of such bills.

In the case of the bank acceptance the standing and credit of the accepting bank make the paper it accepts a security of the highest class. The bank acceptance at once eliminates the necessity and trouble of closely investigating the drawer or the endorsers, as the primary responsibility rests with the accepting bank. If its credit is good, all other names on the paper may be considered of secondary importance.

There is no reason why an exporter here should not request his customer abroad either to designate a reimbursing bank or to open a credit through his bankers along the lines before mentioned, as it is a customary procedure. Such an arrangement provides the exporter with cash for his sales, which otherwise he would have to wait a very considerable time for.

European Market for Reclaimed Rubber

By André Dubosc

Now that the war is over, and that business is gradually working back to normal, France, Belgium and Italy will offer good markets for American reclaimed rubber.

Heretofore, these countries have absorbed comparatively small quantities of reclaimed stock chiefly because their rubber manufacturers lack knowledge of the use of this valuable material. There being much educational work to be done in promoting the sale of reclaimed rubber under these conditions, a chemist, who at the same time is a practical rubber man, will be required to develop the possibilities of these markets. It will take a man of this training and experience; a man who can go into the rubber factories, give formulas for compounds, see these carried out, supervise the shaping of the articles to be manufactured and superintend the "cure," to demonstrate to manufacturers the fact that reclaimed stocks can be successfully used in many ways unknown to them.

France and Belgium consume annually about 16,000 tons of crude rubber, and at this rate it can be safely estimated that these countries offer a potential market for about 6,000 tons of reclaimed rubber per year. This tonnage could be disposed of at good prices, for the domestic reclaimers do not offer the excellent qualities of stocks American reclaimers do.

In Italy, the rubber industry has grown immensely since the outbreak of the war and now offers a potential market for from 3000 to 4000 tons of reclaimed rubber per year. Though the largest Italian rubber manufacturer has an extensive reclaiming plant of its own, it cannot begin to supply the demand that could be created in Italy for reclaimed rubber.

This being the case it is safe to estimate that, with proper and intelligent effort, 10,000 tons of reclaimed rubber could be sold annually in France, Belgium and Italy. So large a market could not, of course, be developed by non-technical salesmen, but it can be done by a practical rubber chemist possessed with commercial instinct.

Three classes of rubber articles, in which large amounts of reclaimed stock can be used, have taken an enormous development since the outbreak of the war. These are solid rubber truck tires, insulated wire and artificial leather.

The use of motor trucks has been greatly extended and will continue to grow, due to the shortage of horses and the fine showing this means of transportation made during the war.

France has always been short of coal and imports a large percentage of its requirements of this commodity. The Germans destroyed the richest of the French coal fields and the high cost and scarcity of ocean freight coupled with this and the increased need of coal for war industries, caused the nation to pay more attention to the possibilities of its water power. Power transmission and hydro-electric plants have been greatly extended and will continue to receive active and intelligent attention. Hydro-electric power requires for its transmission large quantities of rubber insulated wire, for manufacturing which large proportions of reclaimed rubber can be satisfactorily used.

The depletion of our herds has brought about an acute shortage of leather, which cannot be overcome for many years, and it has taught our people to appreciate the merits of the artificial article.

Artificial leather has obtained a firm hold in our markets and will henceforth be an important branch of our rubber industry just as it is a fairly important branch of the American rubber industry. The manufacture of artificial leather absorbs large quantities of reclaimed rubber.

In my opinion American reclaimers could control the French and Belgian, and perhaps also the Italian market for reclaimed rubber, if they can come to an understanding among themselves and combine for foreign trade, which they are permitted to do under the Webb-Pomerene law. There undoubtedly are real difficulties in the way of such a plan, but these should not prove to be insurmountable.

A combine of American reclaimers could open well equipped offices in Paris, and by using all modern methods promoting sales, it could get the bulk of the business.

I am familiar with the enterprising spirit of my American friends and I feel sure they could make a success of such an undertaking if they will act promptly.

Versatility of Export Associations in Foreign Business

By Frederick Todd

Export Department, National City Bank of New York

We are having in this country, at this time, a very important development in the rapid formation of Export Associations under the Webb Law, if certain indications hold true. The National City Bank of New York has had inquiries enough to show this, and we are informed by lawyers specializing in this business that there is much organization going on. Some of it of which we are informed is still only in the formative stage, the formal taking out of charters not having yet been reached. The law reads very simple, but it is proving a matter requiring much negotiation and study to get competing and non-competing manufacturers of products closely resembling each others' here, and widely differing there, into an agreement for joining into foreign marketing organization which satisfies conflicting interests.

The law seems simple and clear, and perhaps it is so. It exempts from the prohibition of the Sherman Anti-Trust Law all agreements and combination for the purpose of foreign selling, in the following words:

> SEC. 2. That nothing contained in the Act entitled "An Act to protect trade and commerce against unlawful restraints and monopolies," approved July second, eighteen hundred and ninety, shall be construed as declaring to be illegal an association entered into for the sole purpose of engaging in export trade and actually engaged solely in such export trade, or an agreement made or act done in the course of export trade by such association, provided such association, agreement, or act is not in restraint of trade within the United States, and is not in restraint of the export trade of any domestic competitor of such association: *And provided further*, That such association does not, either in the United States or elsewhere, enter into any agreement, understanding, or conspiracy, or do any act which artificially or intentionally, enhances or depresses prices within the United States of commodities of the class exported by such association, or which substantially lessens competition within the United States or otherwise restrains trade therein.

The Act goes on to describe the formation of chartered companies, under the regulation of the Federal Trade Commission, to do what is permitted above. The following part of Section 1 of the Act seems to prevent any arrangements for combining the processes of manufacture in anticipation of foreign sale:

> . . . the words "export trade" wherever used in this Act mean solely trade or commerce in goods, wares, or merchandise exported, or in the course of being exported from the United States or any Territory thereof to any foreign nation; but the words "export trade" shall not be deemed to include the production, manufacture, or selling for consumption or for resale, within the United States or any Territory thereof, of such goods, wares, or merchandise, or any act in the course of such production, manufacture, or selling for consumption or for resale.

The law provides for the form of charter, and for the supervision of Export Associations' business by the Commission.

It was probably never anticipated, when the law was in the making, how many forms the new commercial creature it provides would take. In the first place, a considerable number of international jobbing and commission companies that do a purely merchant business have seen fit to take out the charters. A number of companies formed during war-time for marketing machinery and raw materials on a large scale, and which had contracts with manufacturers for the purchase of their products, have chartered under the new law. It is thus seen that many Export Associations are not combinations of manufacturers in reality, but are selling companies that organize as corporate entities and make contracts as they please. Presumably they may occasionally close these contractural relationships and form new ones, which seems to get entirely away from the first idea of the law, to have associations primarily formed by "member" manufacturing concerns. It is now a pertinent question whether an Association which is a combination of manufacturers, and an Association which is an absolutely independent selling company, have any distinctions as regards the provision of the law, quoted above, apparently forbidding cooperation in manufacture. Some lawyers believe that the latter kind of Association could legally make contracts with manufacturers for separate parts, or successive stages of manufacture, and thus establish combination in manufacture in fact. And it is regarded as a likelihood of the near future that many of the simpler forms of Association will effect combination in manufacture by completing abroad the assembling of combination products, thus plainly avoiding the prohibition, if there is such prohibition, of "production within the United States."

The question of the legality of associate manufacturing activities comes up not because of any disposition to merge manufacturing activities, although there might be economies in this, but to combine in certain lines of industry where manufacture is completed through various stages by different concerns. For instance, an Association is now in process of negotiation in which there are three sets of manufacturers; one group or set fabricates a primary commodity, another set then takes this primary manufacturing material and, using the third group to carry out certain processes for it, completes the product and markets it. There is no question now of the legality of a single manufacturer of the first group contracting to supply any number of manufacturers of the second with materials, or of any one of the second contracting with several of the first for different parts or different grades of his supply. Manufacturers of the second group freely contract with several of the third for their part of the process. But now the question arises, can a group of the first, second and third all combine in one Export Association, in good faith trying simply to build up an American trade abroad by combined efforts, without the possibility of being charged with "manufacturing . . . within the United States" in combination?

The most liberal and sane advice is that they can freely do so, as long as they do so in good faith, keeping absolutely to export contracts. Any prosecution of the Association would necessarily be conducted under the Sherman Act, under the "rule of reason," and it would be necessary to show its intent and the effect to be that of restraining trade or conducting a monoply.

In the case of this proposed Association, as in nearly every case of formation of an Association, the purpose of the merger of foreign-trade interests is to make possible the conduct of a world-wide campaign of advertising, education of consumers, and intensive selling, using a selling personnel of high-salaried ability, and fundamentally extending American methods to the foreign markets, modified wherever necessary. None of the individual manufacturers, who have capital enough to do what they will, if they see productive use of money, could obtain sufficient business to conduct such a campaign individually. It happens also in this proposed combination of foreign business, as it will happen in the case of many others, that by handling the export business of all as one business, they can allot production among member-firms in such a way as to do the manufacturing on a much larger scale as regards particular styles and grades of prod-

uct than if they were doing it individually, and so to obtain much lower unit costs of manufacture. By going into foreign-trade as a unit, they can not only afford a much more extensive, intensive, and skillful sales campaign over the world, but they expect to have a Board of Production in which the otherwise competing manufacturers will exchange and combine ideas, instead of working separately. This Board will of course confine its attention to the manufacturing problems arising in connection with the production of special designs, sizes, etc., to meet peculiarities of foreign demand. As they are still competitors for domestic business, the members will presumably not disclose fully to each other their ideas about goods for this market. If any member-manufacturer develops a new product of appealing sales quality here, it will go to the export market as his individual product.

It might seem a simple thing to get a dozen manufacturers together and arrange for a combined selling agency, but the fact is that after a general understanding has been secured the real work begins, and becomes a complex problem, how to adjust the different interests of the members. One Export Association is now "under construction" in the hands of a certain captain of industry who put together one of the typical industrial mergers of about fifteen years ago. In his view, the strong Export Association is really a merger of every line of the members' interests as applied to export business, and he is building upon that idea. He finds the adjustment of conflicting interests even more complex than in the old industrial merger, for the reason that the different manufacturers are every one desirous of retaining full competitive strength in the domestic market, they do not practically sell out everything for a stock interest in the new concern, they retain individuality of interest even in the export business because in its development they see that one does not share in the gains of another, as far as individual profits go. And so one of the first problems as seen by this man is the proportioning of the profit of each individual manufacturer to be obtained direct from his business through the Association to the general profit of the Association which will be shared among the members in the form of dividends. His tentative plan is to limit the individual profit to a small percentage, say from two to four per cent, of a cost of manufacture determined upon for each kind of article by the whole group upon the average, make contracts by which each manufacturer will deliver such quantities as are called for by the Association's management, with certain limitations, and thus bring it about that the member's profit in his business with the Association will consist of the economies of production which he gets from larger output and a very small fraction of his cost. He will thus not exert continuous pressure and influence on the Association to push his particular goods, and will be interested in the broader welfare of the Association, whose bigger share of profits in his and the other member's goods will come back to him in a dividend. He is urging upon his manufacturer colleagues this belief: that the element of strong organization of salesmanship as against price or even quality of goods, in foreign marketing, is so predominant, as to make it a matter indisputable that any individual will gain so much more out of the Association than he could possibly gain by individual effort, that he can afford to sacrifice a good deal, here and there, in the internal adjustments of the business. There is an apparent weakness in this plan: that if some one manufacturer's product should "take" abroad and create so great a demand as to tempt him to draw out and sell alone; but the probabilities are that the organized "good will" of the Association would always be more powerful than the direct demand for the goods.

Some Export Associations now forming are not alone cooperative affairs to afford a group of manufacturerss a way of combining foreign efforts, but will have stock capitalization, with interests outside the contributing manufacturers. A certain group has resorted to this expedient because, they say, the members will require individual increases in capital to carry on their manufacturing, will require about all they can obtain, and so are willing to share Association profits with outsiders. In such an Association, it is almost inevitable that a conflict of interest between the manufacturers and the Association as a distinct corporation will arise. The particular group here mentioned expect to control this by majority of stock ownership, but there are possibilities of this being upset by the defection of manufacturer-members.

Naturally, the "tug of war" comes in the allotment of interest and business between members. In some Associations, like those formed to market such products as coal, cement, copper, etc., which are so standardized and graded as to be considered homogeneous (although of course qualities do differ) Associations seem to be formed ordinarily on the basis of a certain normal year's domestic output; that is, shares in the Association and allotment of foreign business will at the start be apportioned upon this basis, with periodical adjustments.

But when it comes to forming an Association of manufacturers of specialties, or of heavy staple goods along with specialties produced as by-product, the job of reconciling a dozen enthusiastic men each of whom is figuring, not about last year's business, but on the vast future of "good will" which his surpassing product, because of quality, special design, exclusive patent features, etc., must "inevitably" win, not only here but over the whole world, then the fun begins. It is complicated when the group contains not only several men who have never though of exporting but two or three enterprising fellows who have already been tasting success abroad, have a "lead" that they fully appreciate the value of, good information, and maybe have a sales organization that the Association wants to acquire. It then becomes genuine "collective bargaining."

However, as soon as the elements of human nature in the problem are adjusted, the Export Association's versatility to meet every possible situation admirably shows itself. Any sound co-ordination of business interests to do foreign business can be put upon a "brass tack" basis of agreement and legal incorporation in it. The Export Association can be cut to fit any circumstances. It may be a dozen competitors who join in the simple work of effective foreign selling. By means of the Export Association they can legally and bindingly contract to do several comparatively simple things: (1) They can employ a strong export manager and together develop the biggest possible export. (2) They can divide the foreign markets among themselves territorially for individual cultivation without competition. (3) They can divide the markets between themselves by kinds of product, each specializing effectively on some line, with the benefit of quantity production.

Or it may be a dozen manufacturers who do not compete at all but produce different articles that together make up a complete line, or which are usually associated together in trade. They are thus able to go to foreign customers with the convenient and economical possibility of stocking him up full and making combined shipments. Hardware, paper, leather goods, notions, paints, garments, scores of lines can be effectively associated in this way.

Some Associations are formed upon the agreement that manufacturers joining must sell abroad exclusively through the Association. But this can be modified many times to advantage. Individuals are permitted

to continue individual foreign marketing of specialties, putting only staple lines through the Association. In one Association a group of manufacturers has been taken in on a tentative basis without full membership, because they did not desire, or were unable through existing contracts, to sever existing arrangements with international jobbers. These manufacturers of this Association will simply furnish to it their goods on contract. In negotiations now proceeding for the formation of another Association, a strong manufacturer who already has an export trade of his own desires to continue his individual foreign organization to push certain special goods, and he will probably enter as a full member, with a contract by which he will sell his specialties and the Association goods, and the Association will do likewise. One Association does not expect to do its own marketing, but as an Association will obtain the exclusive foreign selling service of a large international marketing corporation. These instances indicate the almost limitless possibilities of the Export Association. Its function is to solidify and co-ordinate in contractual form what it is inexpedient to attempt by mere "gentlemen's agreement" or loose association. For instance, a large manufacturer of an important American staple has for years believed that an extensive campaign of education of foreign consumers for these goods would convince them of their ultimate superiority and bring a great sale. But he manufactured the primary form of the staple. He could not control the foreign sale. "If I could go into an arrangement," said he in 1915, "by which I could help in the campaign of education and be certain of my return from it, I'd gladly put money into it." He can now manage it to his wish, and will probably be part of an Export Association.

One of the interesting possibilities of the new law is the formation of effective Community Export Associations, with which members of Boards of Trade and Chambers of Commerce may join, to incorporate and, at small individual expense, organize the export possibilities of a single city. This idea is now apparently working out. Although in direct sales cultivation it is best to concentrate on definite lines and not scatter lines too much, there are some general services that the Community Association can perform. It can organize cooperation for obtaining from all the city's representations abroad a service of live trade information of special home interest. It can serve as a means of making better shipping arrangements for all the city's exporters. It might organize a community forwarding plant. It might establish a community trademark.

The question of what capital an Export Association should have is a practical one. If the Association is a distinct corporate entity, as most prove to be even when formed by a group of manufacturers as a "close corporation," the individual responsibilities of the membership are only indirectly reflected by it, for, legally, their individual liability for its debts is limited. Practically, an Association of responsible concerns will take on some of their responsibility in spite of this technical fact. And it is recognized that a group of small, but reliable manufacturers, formed into an Association, acquire influential credit standing. However, in order to command banking credit in foreign operations, it is necessary to have a paid-in capital, ordinarily, to a sufficient amount to give the margin of responsibility which bankers ask for to back up lines of discount or acceptance credit. This capital may be used for business.

Export Associations naturally have credit and other financial relationships with members. The question is decided on individual circumstances how long the manufacturer shall give the Association to pay for what he delivers for foreign sale. It works out practically to mean whether the manufacturer shall furnish the credit to the foreign customer, or the Association shall. Obviously the manufacturer's interest in the profit counts in this decision.

A Large American Rubber Mixing Mill

Essentials of Foreign Trade

By Wm. E. Aughinbaugh, M.D., LL.D.

Professor of Foreign Commerce, New York University

After more than twenty years' actual and practical experience in the markets of Europe, Asia, Africa, Latin America, Mexico, Canada, the East and West Indies, during which time I sold American-made goods, planned and conducted advertising and business-getting campaigns and studied foreign marketing conditions, I have been forced to the conclusion that neither the business men of the United States nor the Government of this country are doing what should be done for the extension of our overseas trade or for the retention of the foreign business which has come to us through the present European hostilities.

It is still the attitude of the manufacturer of this country that foreign markets are good only for excess productions and not worthy of taking the trouble to develop seriously. The real fact is that they are today as they have been in the past the most verdant fields of opportunity the world knows. Before this war there can be no question that almost all of Europe was dependent upon the overseas markets for its support. The time is at hand when the United States will be equally dependent upon these foreign markets, but we have, I regret to state, approached the problem without giving it the serious study and consideration to which it is entitled.

In order to properly develop and maintain a foreign trade, in my judgment twelve essentials are absolutely necessary, namely:

First. A complete chain of banks in the overseas countries cooperating with home institutions, able to render substantial and prompt financial aid to both the exporter and importer.

Second. A national merchant marine, independent of governmental control, but subject to its orders in time of war.

Third. The establishment of trade relations with other countries on a reciprocal basis.

Fourth. The organization of a newspaper cable service similar to our Associated Press, with the object of daily, mutually exchanging news items of international interest.

Fifth. The enactment of flexible tariff laws.

Sixth. The improvement and extension of our consular service.

Seventh. The recasting of all of our trade treaties.

Eighth. Intimate cooperation and coordination by and between our government with manufacturers, exporters and trade associations.

Ninth. The employment of Americans in managerial and executive positions abroad with all American organizations.

Tenth. The employment of qualified Americans to manage corporations engaged in foreign trade.

Eleventh. The absolute protection, by force if necessary, of the rights of the American investor in foreign lands.

Twelfth. The immediate sending of qualified trade commissions to neutral and Allied countries with authority to encourage trade relations.

Let us briefly consider each one of these suggestions.

The first of these requirements is in the process of a satisfactory solution. Our bankers have seen the wisdom of profiting by the Federal Reserve Act and as a consequence chains of banks have already been established in Brazil, Argentine, Uruguay and Chile. Other American financial institutions have opened their doors in Venezuela, Colombia, Central America and the West Indies. Bolivia, Ecuador and Peru are being seriously considered as banking prospects by an important group of American bankers, while throughout Europe and the Orient the door of other monetary concerns have been opened to trade. It is only a question of time before the world will be girdled with a chain of American banks and the dollar as the standard of exchange will become a reality and will supplant the pound sterling, or at least be its closest competitor.

But much remains to be done. The Federal Reserve Act needs many amendments and alterations before it will properly aid the exporter and manufacturer and render him the assistance that European banks do their clients. European banks are able to discount long-time paper. The Federal Reserve Act falls short of helping us in this regard, for it limits the life of a foreign negotiable draft to ninety days. It has numerous shortcomings which for obvious reasons I must leave to the banker for discussion, but one of our greatest mistakes regarding this act is that we have not educated the people whom it was intended to help, to its advantages.

I venture to say that 75 per cent of those to whom it might render a practical service are absolutely unaware of its existence. A persistent educational campaign is needed to present its uses to the manufacturers and producers in the small towns of the land so that each one may profit by its liberality. The larger companies operating along our seaboard can finance themselves as they did prior to the passage of this law, but today the smaller manufacturers are in substantially the same position as they were before it existed, through their ignorance of just how it can serve them.

One method of attaining this result would be by the larger banks in the metropolitan districts issuing weekly letters explaining in details the service they are in position to render manufacturers and experts. These letters should be sent to all depositors of the country banks affiliated with the larger institution, care of course being taken that such information was sent to such manufacturing firms as might profit thereby.

Our shipping laws need a complete overhauling. The foolish La Follette Seaman's Act should be stricken from the statute books and a bill passed suitable in its scope for the emergencies which confront us. It should be prepared by those familiar with competition in this line and aware of the proper remedies needed. Fortunately we have left in this country, despite the fact that every effort has been made by legislation to wipe us from the sea, men entirely competent and capable of framing laws which, if enacted, would rehabilitate our merchant marine on all the seas of all the world again. In my last trip around the world I saw the American flag but once on an American ship, and she was a small schooner laden with ties for Chile.

The termination of the European war will perhaps find us with a large fleet of merchant ships. Unless we can utilize these vessels to carry our goods to foreign markets as cheaply as our competitors—and let me state that we will have competitors in plenty—we need never hope to amount to much as an exporting nation. Germany, after the Franco-Prussian war, was obliged to build her own merchant marine because as cargoes multiplied her freight rates increased due to her dependence on foreign bottoms, and export markets acquired after much labor were rapidly closing.

The same condition will be repeated in our case unless we can operate these ships more economically. I know of one shipment of parquet flooring the

invoice price of which was $1,300 costing the importer $1,400 for freight from New York to Buenos Aires, when under ordinary circumstances the freight should not have been more than $250, but the British cargo carrier had the American manufacturer at his mercy.

Vessels cannot be profitably operated unless they are provided with docking facilities, lighters and warehouses aboard. If we hope to get into the shipping industry properly we must be able to make c. i. f. quotations to exporters on goods intended for interior towns at railway heads as well as ports. We should now be arranging for terminal and railway connections, otherwise our goods and our ships will be held in foreign ports with all kinds of fees accumulating against them which in the end must be charged against the price of the goods, thus ultimately closing markets to us.

To guide, maintain, and support and control this great fleet we should have a new Cabinet officer to be known as the Secretary of Marine Affairs and an experienced and practical man should be the incumbent of the office. Every large nation excepting the United States has such a Government official.

The third factor of importance, namely, the establishing of our overseas trade on a reciprocal basis is logical and exhibits good judgment. To expect to ship a nation your raw or finished products, receiving in exchange therefor a monetary consideration, is neither sensible, equitable nor practical. European powers obtained their foothold in foreign markets because they developed their trade along those inter-dependent lines. The sparsely populated countries of the world are the greatest producers of crude materials that the manufocturing nations require to keep the wheels of industry moving.

Due to their isolation, the type of their inhabitants, the lack of available capital and other controlling and dominant conditions, they rarely develop into manufacturing communities. But each one of these nationalities buys in profusion the very goods made from their raw materials that the highly organized manufacturing countries elaborate. It does not, I feel, require much argument, therefore, to convince one that business will be more mutual and trade more extensive between those nations which buy raw materials and ship in return factory products therefor.

The extraction of the crude articles and their elaboration into finished products gives employment to the peoples of both countries, helps fill ships with cargoes both ways, necessitates less actual movement in the medium of exchange and makes each more dependent on the other. Besides, it has a strong tendency to overcome any national misunderstanding which might lead to war. Briefly it is the ideal manner in which to develop and retain a business.

To be specific, Bolivia is the world's greatest storehouse of metals, minerals and drugs. It has in profusion tin, silver, nickel, antimony, copper, gold, wolfram, zinc, bismuth and borax. It gives to the pharmacopoeia aconite, arnica, belladonna, camphor, cocaine, digitalis, ipecac, jalap, quinine, sarsaparilla, tolu and valerian. Its rubber forests are almost virgin. Practically all of these materials are shipped to Europe, there perfected into the finished article of commerce, then sold to the merchants of the United States at a great profit. On bismuth alone a profit is made by fourteen foreigners before it gets into the hands of our drug jobbers, yet it is used in about 30 per cent of the physicians' prescriptions.

Why do not our wool buyers establish themselves in the Argentine, Uruguay and Paraguay, and buy wool direct instead of through European brokers? I might also ask this question regarding alpaca.

Ecuador's chief product is cocoa. We are the largest users of cocoa in the world, yet Europe buys 90 per cent of each crop, converts it into chocolate and sells us 50 per cent thereof, at an enormous profit, while we only purchase 20 per cent of the output direct from those who grow it.

The linseed of the world is grown in India, Argentine and Uruguay. A Greek firm dominates this market, while we, the largest users of the oil, seem perfectly content with our indolency in this field.

We allowed the Germans to create and control, prior to the war, the button market, manufacturing this necessity from the tague nut which grows in Colombia, Ecuador and Venezuela. With our natural manufacturing genius and our nearness to the sources of supply we should control this trade. Despite the lack of buttons throughout the world, but two American firms have taken advantage of this possibility.

The nitrate fields of Chile are in the hands of Europeans. Our interests there are almost infinitesimal.

In none of the world's markets have we made any serious effort to develop our trade along reciprocal lines.

California is in a wonderful position to develop a reciprocal market with the West Coasts of Central and South America, as well as with Australia and the Orient.

We have overlooked the fact that in Latin America alone there are today perhaps 1200 daily, weekly and monthly periodicals of importance—that they reach the intellectual classes—those whose opinions reflect the sentiment of the country. The power of the press is great and through it national hatred and ridicule or national sympathy and esteem may be created.

This makes it a potent factor in developing the good will of a people—a condition which of necessity must exist between nations before they proceed to the intimacy of commerce. The Latin American press receives its knowledge of the outside world entirely through the European press agencies—the Wolff agency of Berlin, the Havas agency of Paris and the Reuter agency of London.

Due to jealousy or for commercial or political reasons the news sent out is so distorted as to appear ludicrous to us Americans who are familiar with the true state of affairs, but which is accepted as absolutely true by our Latin-American neighbors. Very naturally these European agencies tell the friends to the south of the Rio Grande that the Monroe Doctrine is only a joke and intended as a blind to conceal our real motives of acquiring territory.

They have been doing this very thing for years so that there has ultimately been spread throughout the length and breadth of Latin-America a feeling of distrust for what they have been pleased to call "the Colossus of the North."

Today all of these nations believe that Uncle Sam is looking on them with avaricious eyes, eagerly and anxiously awaiting some pretext whereby he can control affairs. Our politics, our lynchings, our stock manipulations, our bank failures are all treated by these European news agencies in a manner intended to reflect dishonor upon us as individuals and collectively.

As an example, many papers of Latin-America in referring to the execution of the four gunmen at Sing Sing said that the State of New York was so financially embarrassed that in order to defray the expenses of the affair the public was admitted at 25 cents per person. I might also add that this was the version of the story published in most of the European papers also.

The result was that all over Latin-America the press attacked us as a nation of barbarous and brutal Yankees, and otherwise severely lambasted us, entirely unmindful of the fact that their own lands have been the scenes of some of the worst carnage that history records.

(To be continued)

L. D. GARDNER, PRESIDENT
W. D. MOFFAT, VICE-PRESIDENT
W. I. SEAMAN, TREASURER

THE RUBBER AGE AND TIRE NEWS

W. M. MILNER, EDITOR
H. M. WILLIAMS, GENERAL MANAGER
H. B. SEYMOUR, BUSINESS MANAGER

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THE American rubber industry had, before the war, a capacity for production which was two-thirds of the total rubber manufacturing capacity of the world. Most of this output was needed to fill the requirements of home markets, especially in automobile tires, only a small surplus of product being under normal conditions available for exportation.

Since the war started, however, the rubber industry, fourth in size among American manufacturing industries, has so increased in size that today its productive capacity is well in excess of domestic requirements. American rubber manufacturers now find themselves in position to offer to the whole world the benefit of increased and perfected facilities in manufacturing and marketing, together with such other advantages as credits, prompt deliveries and standardized products, made possible by their large financial resources and modern production methods.

Though the United States is dependent, like all other industrial countries, upon outside sources for its crude rubber, it stands pre-eminent in the manufacture of rubber goods. No other country or group of countries manufacture rubber into so wide a variety of products, and nowhere else are found rubber manufacturing organizations of such size and so perfected in technical and commercial development as those of the United States.

Prior to the war, and due to the rapid growth and importance of the home markets, which constantly taxed their capacity for production, American rubber manufacturers were not as a whole interested in foreign business. But when the war deprived foreign consumers of their former sources of supply, the American rubber industry, wherever it was permissible to do so, came to the rescue and did its best to supply the needs of these consumers.

By increasing its capacity for production, the industry was able, in spite of the most adverse conditions, to supply a large new foreign demand, and at the same time satisfy domestic needs that were far greater than ever before in the history of the United States. From $12,000,000 in 1913, America's exports of rubber products, independent of shipments made to its Army and Navy overseas, increased to $33,343,181 in 1918, and statistics show that this growth was an actual increase in quantities exported and not chiefly a reflection of inflated prices. This expansion of foreign business which resulted from war conditions has caused American rubber manufacturers to take real interest in foreign trade. Having obtained a practical knowledge of the requirements of foreign buyers, their preferences and their objections, they are now in a position to extend to the trade and to the consumers abroad the same unexcelled service which they are rendering to their home trade.

American rubber manufacturers are already using their unequaled facilities and means for making a specialized study of foreign markets, and foreign buyers now realize the advantages to be deprived from forming connections with the highly efficient, well financed and conscientious organizations that have built in America an industry that consumes more than two-thirds of the world's crude rubber output.

Rubber Industry Is in Sound Condition

The past year was a prosperous one for the rubber industry taken as a whole. Notwithstanding Government restrictions placed on the importation of crude rubber and on the manufacture of certain rubber products, especially automobile tires, the volume of business of the American rubber industry was the largest in its history and profits were satisfactory.

Though the sudden and unexpected ending of the war has left many rubber manufacturers with unusually large stocks on hand, both of manufactured goods and of raw materials, there does not appear to be serious cause for apprehension on account of the high costs at which these were secured. The manufacturers concerned are confident in their ability to liquidate these stocks with little or no loss.

The ingenuity of American rubber manufacturers is showing itself just as efficient and just as resourceful in peace as in war, and business reorganization and readjustment to new conditions are being carried out smoothly and without serious dislocations or reactions. Optimism is general and there are undoubtedly sound reasons to believe that the rubber industry is on the threshold of opportunities of peaceful enterprise offering great possibilities for permanent prosperity.

Wages have reached a very high level, but, as far as the rubber industry is concerned, there is reasonable hope that prices can be maintained sufficiently to provide a margin which would prevent any radical wage readjustment until the cost of living has returned to nearer normal.

The present year is not likely to witness any material advance in the price of crude rubber. Though the world's consumption of this commodity will no doubt show a big increase over that of previous years, this increased demand should be easily taken care of by the stocks that have accumulated in the Middle East.

Happenings of Interest to Rubber Men

Peace Business Reviving in Akron—Rubber Footwear in Government Hands—Bergen Needs Rubber Goods—Further Removal of Restrictions —K. & B. Have New Akron Agent—Du Pont Seeking to Purchase Rubber Company Report—Other News Items

Boom Starting in Akron

Akron is beginning to enjoy the fruits of peace. The rubber companies, restricted by war-time orders, are getting into full swing again and the boom days of 1916 are likely to be re-enacted here.

During the last year of the war there were plenty of vacant houses in the "city of standing room only." That condition is rapidly changing with the return of soldiers from overseas and cantonments and the gravitation of war workers toward a center of activity. It is becoming increasingly difficult to rent a house and the sale of homes is reviving.

Government Stock of Footwear

According to a report of the Statistical Division, the Quartermaster General of the Army had on hand not in possession of troops, as of December 1, 1918, 2,419,016 pairs of rubber hip boots, and 554,565 pairs of rubber knee boots.

American Chamber of Commerce in France

The American Chamber of Commerce in Paris, an organization incorporated under the laws of the District of Columbia, has changed its name to that of American Chamber of Commerce in France, and has transferred its headquarters from 3 Rue Scribe, Paris, France, to 32 Rue Taitbout, same city.

The American Chamber of Commerce in Paris has rendered marked services to American exporters and to French concerns exporting to the United States throughout the duration of the war.

CHARLES B. SEGER, PRESIDENT, UNITED STATES RUBBER COMPANY

Bergen Rubber Goods Market

American Consul Ralph C. Busser, stationed at Bergen, Norway, reports that since 1917 rubber footwear and other rubber goods have not been on sale in shops of Bergen, and that there consequently exists a severe shortage of all rubber products in that city and district.

More Restrictions Removed

The Rubber Association is advised by the War Trade Board that effective December 20, 1918, the restrictions as to the quantity of balata, gutta-percha, gutta-joolatong and gutta-siak, which may be licensed for shipment from overseas, have been removed.

On and after this date licenses to import balta, gutta-percha, gutta-joolatong and gutta-siak from overseas will be issued without limit as to quantity providing applicants conform with all existing regulations of the War Trade Board. Government option prices have also been withdrawn and no further undertaking relative to maximum prices will be required.

Attention is particularly directed to the fact that the relaxation of these restrictions only affects shipments from primary or overseas markets.

It will not be the general policy of the War Trade Board to issue licenses for the importation of the above specified commodities from points other than primary or overseas markets until after March 20th, 1919. This policy will also apply to shipments now in the United States which have arrived in violation of the regulation.

Adams to Represent K. & B. in Akron

H. J. Adams, former Purchasing Agent for the Firestone Tire & Rubber Company has incorporated under the name The H. J. Adams Co., and will conduct a rubber supply business with offices in the Second National Bank Bldg., Akron, Ohio.

The new company will represent exclusively in Ohio, Katzenbach & Bullock Company, well known manufacturers, importers and dealers in rubber compounding chemicals and colors, with offices at New York, Trenton, Chicago, Boston and San Francisco.

Mr. Adams' long association with the rubber industry, and his knowledge of compounding ingredients, gained during his years with the Firestone Company, will undoubtedly prove of great value to the patrons of Katzenbach & Bullock Company, who are engaged in that line.

For the convenience of less-than-carload buyers, and to provide quick delivery when required, a full line of stock will be carried in warehouse at Akron.

Mr. Adams and the Katzenbach & Bullock Company have our best wishes for the success of their new arrangement.

Report Du Pont Interested in Rubber

(*Special Akron Correspondence*)

A report is current in financial circles here that the Du Pont Powder Company interests are seeking control of a large rubber plant. Akron rubber manufacturers, however, say that they know nothing whatever about it.

According to the rumors, the Du Pont interests are seeking to invest their war earnings in some business which gives large and quick returns. The recent growth of the rubber business and its rosy future make it one which would attract such an investment.

Remember Friends with Calendar

For the past thirteen years the J. H. Stedman Company, South Braintree, Mass., well known scrap rubber merchants, have been remembering their friends at the new year with calendars illustrating old New England scenes. This year's calendar equals its predecessors in artistic value and shows the old mill and mill race at Raymond N. H.

TIRE NEWS

Proposed British Tire Standards

The problem of reducing the number of tire and rim sizes now being manufactured, which is still an open question here in America, notwithstanding the excellent work already done by the S. A. E. and by the War Service Committee of the Rubber Industry, working in conjunction with the Conservation Division of the War Industries Board, has also been occupying the attention of British tire manufacturers. The motor pneumatic tire, solid rubber tire, and cycle and motor cycle tire sectional committees of the British Rubber Tyre Manufacturers' Association have had the matter before them, and some time back asked W. H. Paull, one of their makers, to prepare a draft scheme with a view to eventual standardization of a limited range of tire and rim sizes, capable of meeting the requirements of the present and future productions of bicycles and motor vehicles of all types. We are indebted to our English contemporary, the *India Rubber Journal* for the privilege of publishing the following paper submitted by Mr. Paull, and discussed at a general meeting of all sections of the British Rubber Tyre Manufacturers' Association. The proposals of this paper were unanimously adopted, with some slight modifications, by a Standardization Committee appointed by that association.

At the meeting above referred to it was decided to submit the schedules included in Mr. Paull's paper to all British manufacturers of cycles, motor cycles, passenger cars and commercial motor vehicles, and to ask their cooperation in this effort to limit the number of tire and rim sizes to be used on new vehicles. The modifications agreed by the Standardization Committee are all embodied in the reprint that follows.

It is intended to submit the proposals adopted to the Technical Committee of the Motor Industry, and request that body to recommend them for standardization by the British Engineering Standards Association with amendment of Reports Nos. 70 and 71/17 accordingly.

The British Rubber Tyre Manufacturers' Association, it will be noted, has kept before it, in considering the sizes proposed for standardization, the possibility of eventual international standardization. To this end, certain American (S. A. E.) standard sizes are embodied in the present proposals, together with most of the principally used Continental European sizes, and hope was expressed at the meeting above mentioned that no serious difficulty will be found in agreeing eventually to a limited range of international sizes covering tires of all types.

Mr. Paull's Paper

In the evolution of the now important industry of the manufacture of pneumatic and solid rubber tires, the attempts of the tire makers to meet the varied requirements of manufacturers of cycles, motor cycles, cars and lorries during the years which have seen the gradual evolution of these several types of vehicles, from the earliest forms to the present more or less standardized types, have resulted in the production of a very large number of sizes of all these types of tires. But as these vehicles gradually assumed more and more uniformity of type, so many of the sizes of tires at one time used have been gradually discarded, until to-day, in all types of tires, the great bulk of the demand is limited to a very small number of sizes indeed, and if the tires demanded for the new vehicles are taken separately from tires required for replacement, the number of sizes demanded in any quantity is still further reduced.

The present proposals as to standardization deal only with "sizes" and dimensions, and will not in any way hamper the maker in the improvement in manufacture and development in type of his tires, but by avoiding duplication, or approximate duplication, of diameters and sections, will ensure economy of production, economy in stocking and distribution, and will give simplification of sizes and greater readiness of replacement to the user, and make it much easier for the maker to concentrate on perfecting type and reducing the cost of his product.

Rim Standardization

Standardization in regard to tires has, in this country, so far been limited to standardization of rim dimensions, on which some very valuable work was carried out, largely through the efforts of T. H. Woollen, resulting in the publication in 1913 of a series of rim dimensions for pneumatic tires, afterwards embodied in the E. S. C. report No. 70 issued in 1915.

A measure of standardization of rim and tire diameters for solid rubber tires, which the writer was responsible for initiating, was adopted and embodied in Reports No. 71 and 71/17 of the E. S. C.

However, valuable as has been this standardization of rim dimensions in ensuring the production of rims and wheels giving a proper fit to the tires, the time has now arrived when a further substantial measure of standardization is necessary, having for its main object the elimination of all unnecessary sizes, both of tires and rim, in all types.

Now, it may be thought that the gradual evolution of more standard types of vehicles, with the consequent reduction of tire sizes already referred to, will automatically bring about all necessary standardization of tire sizes. But although this automatic reduction in sizes is very helpful to our present purpose, it is not alone sufficient to give a proper measure of standardization. One or two examples will illustrate the point.

A particular type of vehicle becomes a standard product: a 20 h.p. car—a 3-ton lorry. Makers, having in the past had a large number of tire sizes to select from, have not been unanimous in adopting the same size for their particular model. There may be pretty general adoption of a given section of pneumatic tire, but 40 per cent of the makers may adopt one diameter, say 820, 20 per cent may adopt 880, and 10 per cent 920, with the remaining 30 per cent divided among other diameters, such as 850, or even other sections and other diameters. Now an 820 and a 920 or 880 may be necessary, but is an 820, an 880 and a 920 necessary? There is only a difference of 20 m/m in radius between the two latter sizes.

Then with solid tires, 50 per cent of makers may use, on a 3-ton lorry, wheels of 850 m/m diameter, 40 per cent wheels of 881 m/m diameter, and 10 per cent some other diameter. Is the continuance of both the 881 and 850 diameters desirable? There is a difference of 3.1 m/m in diameter, or only 15.5 m/m in radius, and this in a type of tire subject to variation of wheel diameter, due to tire wear, much greater than the actual difference between the above two wheel diameters—that is, an 881 diameter wheel with a partly worn tire, may be reduced (by tire wear of 25 m/m depth) to an o/a diameter of 20 m/m less than an 850 m/m wheel with new tires. Surely both 850 and 881 wheels are unnecessary.

I submit that such examples show that *the reduction of tire sizes* to a reasonable and satisfactory number *cannot be left to the undirected process of evolution of vehicle type*, and that the longer the matter is left, the more difficult will it become to drop one of, say, two sizes, each of which is largely used, though so

nearly alike that one can quite well do instead of two.

This subject has recently acquired an additional urgency in view of the remarkable measure of standardization of pneumatic motor tires, initiated at the instance of the Economy Committee of the Council of National Defense, U. S. A., by the War Service Committee (division Pneumatic Tires), and since adopted by the Tire and Rim Association of America, and approved by the Tire and Rim Division of the S. A. E. Standards Committee.

This measure of standardization reduces the total number of 287 tire sizes and types in use in the U. S. A. in 1917, to 6 sizes in the various tread types. To fully appreciate this, it is necessary to remember that up to this time pneumatic motor tires have in the States been made in three types:—

The beaded edge or Clincher type.

The Q.D. or beaded edge with wire insertion.

The straight side or wire type.

The present standardization wipes out entirely the Q.D. type, eliminates the beaded edge type for all sizes other than 30 by 3½, with its oversize of 31 by 4 fitting the same rim, and provides for all cars other than Ford and light cars using the same size as Fords, only straight side or wired tires in the following four sizes: —32 by 3⅛; 33 by 4; 34 by 4½; 35 by 5.

The rims for all these tires are all of the same diameter at the tire seat, viz., 25 in., and are of three sections only:—One rim section for 32 by 3½; one rim section for 33 by 4; one rim section for 34 by 4½ and 35 by 5.

In addition, 3 sizes of pneumatic tires of the straight side or wired type are provided for trucks or lorries:—36 by 6; 38 by 7; 40 by 8; all of which fit rims of 24 in. diameter.

In adopting this scheme, the Americans have provided for all existing cars fitted with tires of sizes and types other than those now standardized, by classifying all other sizes now in use under headings of B, C, D and E, and they propose to deal with such sizes as under:—

Class B.—Most popular sizes which are now used as original equipment by many manufacturers, which sizes will have to be continued to take care of the many cars which are now placed on the market. November, 1920, was set as the date for discontinuing the manufacture of tires in Class B.

Class C.—A large number of sizes, which until recently have been original equipment sizes. Many cars are still using these, and they will continue to be useful for a couple of years. November, 1919, was set as a date to stop the manufacture of tires in this class.

Class D.—This includes sizes which have become almost obsolete, and on which there are still some cars running. This will have to be taken care of during the coming summer. November, 1918, was set as a date for discontinuing the manufacture of these sizes.

Class E.—Sizes which are obsolete at the present time, and which all companies agree to stop manufacturing at once.

This scheme is based on most elaborate data, showing the present use of tires in all sizes and types, and it is specially to be noted that the standards adopted do not represent merely the most popular sizes in use; in fact, the most largely used tire (other than Ford size) 34 by 4, is not included in the new standards, neither are 32 by 4 and 35 by 4½ standardized, although both are very widely used sizes.

The sizes standardized are those which give the greatest measure of interchangeability, and provide an evenly graduated scale of diameters and sections, and appear to very satisfactorily meet all requirements, as, for instance, the 33 by 4 replacing 32 by 4, and 34 by 4, and providing an even intermediate step between the 32 by 3½ and 34 by 4½.

It will be agreed that British manufacturers cannot ignore the consequences to them in the world's markets of such an important step, and I submit that *it now becomes an urgent matter* for British manufacturers, of both vehicles and tires to at once simplify their manufacturing programme to such an extent as will enable manufacturers of tires and wheels *to concentrate on quantity production, and secure maximum economy* both of manufacture and distribution.

This subject of standardization is now engaging the close attention of manufacturers in other countries, particularly in France and Italy, and the time is therefore opportune for at least laying the foundations for international standards in tire sizes.

Sizes Required for New Vehicles

Our first purpose, however, must be to agree to a range of sizes best meeting the British requirements. The importance of our export trade, naturally, will require us to consider sizes used in other countries, and keeping before us the sizes principally used in other countries will show us how nearly our own sizes will agree with those of other countries; and enable us, where possible, in discriminating between two or more sizes, to select that which will be of international value.

Before submitting proposals as to sizes, I wish to indicate the principles which govern the proposals set out later on.

First, I take the matter of wheel diameter, and in this it is necessary to have regard primarily, to actual over-all diameter as distinct from "nominal size" diameter, and in the case of solids, some consideration is necessary to the reduction of diameter due to wear.

My comments here may be taken to apply generally to all types of tires—cycle, motor cycle, motor and solid rubber tires —and for convenience, I use the word "vehicle" to cover all types of vehicles fitted with such tires.

Now general practice in vehicle construction has resulted in the adoption of a limited number of wheel diameters being used in the majority of vehicles, and it becomes necessary for us to assume that the survival of these particular diameters indicates their general suitability for the particular types of vehicles.

We have therefore to provide, in our range of standards, tires conforming as closely as possible to those diameters now most generally used. It will also be obvious that for economical reasons, the minimum disturbance of existing manufacturing plants should be preserved.

Hence our first problem is to provide tires in those diameters required both by present practice of vehicle construction and produced by existing tire makers' plant.

Secondly, if we give the vehicle maker tires of suitable diameters, we have to see that we provide tires of those diameters to such sections as will satisfactorily carry the loads imposed on them.

Given these two points, the smaller the number of different rim sections and diameters necessary to carry these tires the better for all, for that gives us the largest measure of interchangeability.

There can, for instance, be no useful purpose in having two sizes of substantially similar dimensions, one in inch size and the other in m/m size, tires so near as to be the same size for all practical purposes, yet not interchangeable on their rims, as, for instance, 30 by 3½ and 760 by 90 motor pneumatic tires.

For pneumatic tires I aim to provide first the minimum number of rims—the minimum number of rim sections, and the minimum number of different rim diameters. For each individual rim I provide (with one of two minor exceptions) two tires, a standard section, and an oversize (not necessarily to be called an oversize).

An examination of the schedules attached will show that this is accomplished without requiring any important alterations in present practice in regard to all our most important sizes.

The important sizes stand as they are; no alterations as to either moulds or rims for those continued in use, excepting as to size marking—quite a small matter.

Inch and Millimeter Sizes

Where an inch size (pneumatic) is adopted, and it can be commonly used as a substitute for a m/m size of similar dimensions, it is proposed to mark the tire both in inches and millimeters, and mark on it the rim it is intended to fit.

My purpose has been to draft a schedule of standard tire and rim sizes, which shall at least provide a basis for discussion.

If we can agree on this, or a similar range of standard sizes, and the manufacturers of motor cars, lorries, motor cycles, and cycles will decide to use only standard sizes for all future productions, our problem will be solved to the lasting advantage of the user, the distributor, the vehicle manufacturer, and the tire maker. To the vehicle maker—whose support is essential to us—the advantages of the proposals are so marked as to scarcely need emphasis. Firstly, they get the diameters and sections they now principally demand, the increased interchangeability of tires to rims; in fact, many chassis or cycle makers will only require to make one size wheel; they will carry smaller or less varied stocks of wheels and tires, and should benefit in the reduced costs of production following on standardization.

The adoption of a range of standard sizes will be of immediate benefit only to chassis or cycle makers. The user to-day will still require tires of the necessary sizes to keep his existing motor or cycle in service, and the distributor will have to supply and tire manufacturer will have to make.

But the demand for all sizes other than standard will be a diminishing one.

Non-Standard Sizes Supply

The recent American standardization programme provides a drastic method of dealing with, and limiting the manufacture of non-standard sizes, by scheduling certain sizes and fixing the date at which their manufacture shall cease.

I do not recommend the adoption of this course by British manufacturers. The present situation makes it impossible to gauge, with any accuracy, the life of existing vehicles requiring old sizes of tires, and I propose that *tire makers shall agree annually, on an analysis of their sales, to the elimination from their lists of such non-standard sizes as can be then dispensed with*, this course to continue until no further demand for non-standard sizes exists. There is another matter

which should be provided for. It is possible that the future may see a demand for a tire and rim of different dimensions to anything included in the standard range. Standardization must not hamper development, and means should be provided whereby a chassis maker evolving a new type, and requiring say a tire of larger diameter, should be able to have his requirements met, the actual dimensions of tire and rim to be settled by agreement, with a view to the dimensions constituting a reasonable step in the range of sizes, in order to facilitate standardization later on, should circumstances render it desirable.

Having once adopted a range of standards, and cut out all non-standard sizes, we must avoid the re-introduction of a further lot of odd sizes, each produced solely to meet the possibly temporary fancy of one chassis maker.

A number of details are referred to by way of special reference note to the various schedules. But some word here may be desirable on the question of tire size markings.

Tire Size Markings

It is well known that present pneumatic tire dimensions are only nominal, and that in most cases tires actually measure less both in section and diameter than the sizes marked upon them.

To correct this there are two alternatives:

1. To alter the actual dimensions of the tires to agree with the sizes marked upon them.
2. To alter the size markings to agree with the actual dimensions of the tires.

If the first course be adopted all moulds will require altering, probably necessitating the scrapping of many moulds, and involving great expenditure of time and money.

Even if this be attempted, only a partial correction can be made, for while the sectional dimensions can be made to agree with the size marking, the o/a diameters cannot be made to agree with the size marking without altering the rim diameters.

If the second course be adopted, *no mould alterations will be required* except that of changing the size lettering; tire dimensions will remain as they are, chassis makers will continue to obtain tires of the dimensions they now have, as also will users; there will be no interference with clearances or load carrying capacities; the only change will be that the markings on the tires will be altered, and to avoid confusion, the old markings should for a year or two remain as well as the new correct British standard marking; further, rims remain unaltered, and the relations of tire sectional width to rim width will not be altered.

The advantage lies entirely with the second proposal, in fact, the first proposition can be regarded as a practical impossibility.

Assuming the acceptance of the second proposal, that is, that the tires be continued to be produced in the same dimensions as at present, and that new actual dimension size markings be adopted as the British standard descriptions, retaining also, for the present, the old size marking with the added prefix "nominal," it remains to determine what these new markings should be.

Accurate Dimensions

It is proposed that a proper allowance be made for "stretch," in the pneumatic tire, that is, that the true dimensions of a tire should be that of a tire which has run say 250 miles on its rim, and so seated itself properly and had the stretch taken out of it. The difference between measuring a new tire first inflated on its rim, and the same tire after running say 250 miles, averages an increase of sectional width of between 4 per cent. and 5 per cent.

The sectional width of a pneumatic motor tire may therefore be taken as 5 per cent. more than its dimensions measured new, on first fitting and inflating it to 50 lb. per square inch.

It will be desirable to use round figures as far as possible for size markings. The round figure to the nearest 5 m/m should be used, i.e., 120 m/m, not 121 — 125 m/m, not 123, etc.

With regard to all sizes other than standards, I suggest the addition to the size markings of the word "nominal," without the addition of any accurate dimensions, as with standard sizes.

In respect to cycle tires the size markings are sufficiently accurate to render any revision unnecessary.

With regard to motor cycle tires, some little revision may be necessary.

In the case of solid tires, the subject of size markings has already been dealt with in E.S.C. Report 71/17, in which the standard form of accurate description, naming first width of tire section at base (an accurate dimension), then the diameter of the wheel rim the tire is intended to fit (also an accurate description) is used—thus, 120 for 850. The overall diameter is not used as a marking. It is a variable dimension, varying as the tire wears, and varying slightly with the sectional profile of the particular make of tire. Yet the overall diameter is always easily ascertainable by the chassis maker when determining clearances, the only occasion when this dimension is required, and he then gets it accurately and is not led into error by misleading nominal overall diameter markings.

Pneumatic Tire Rims

In dealing with rims for pneumatic motor tires, it will be noted that the 65 and 90 m/m sections are dropped, and the 3 in. C.C. and 3½ in. D. American standard sections substituted.

The reason for this is that the 3 in. and 3½ in. *and* 65 and 90 m/m are not necessary, they are so nearly alike. The inch sections are essential to us, and the m/m tires now made can well be fitted to the inch sections in proper diameters, but the reverse is not possible, *i.e.*, inch tires on m/m sections. The profile of the 3 in. and 3½ in. rims is probably better than that of the 65 and 90 m/m dimensions.

Listing British Standards

Quite the most important factor in bringing home to all purchasers and users the importance of securing British standard sizes exclusively, is the method in which the various sizes are presented in the various manufacturers' lists.

It is not sufficient to print a whole schedule of sizes, starring certain sizes, and indicating by a footnote that these are British standard sizes, or even by printing the standard sizes in heavier type, or in a different color.

All lists should present firstly, on separate pages, and in the most prominent manner, British standard sizes exclusively, with a note "For old or non-standard sizes required for replacements, see page....."

This course does not involve any difficulty to the tire manufacturer, but on the contrary will be found a great convenience.

The respective pages should of course be headed, "British Standard Sizes," and "Old or Non-standard Sizes for Replacements," respectively.

It may be found desirable to deal differently with the matter of prices of standard sizes as against non-standard sizes, and a separation into two groups in this manner renders this easily dealt with.

Further, a statement that all British standard sizes are carried in stock, and are available for immediate supply, can be added to the list of standard sizes, and for the list of non-standard sizes, and necessary statement as to certain sizes only being held in stock, and certain sizes made only to order, can be added.

Every possible means should be taken to advertise British standard sizes until all purchasers are fully familiar with them, and so in the most rapid manner simplifying the tire maker's programme.

I am fully conscious of the shortcomings of the proposition as set out in the several schedules attached. It would of course have been a simple matter to provide a range of rim sizes advancing in regular steps both as to section and diameter with tires to fit them, but only a very small proportion indeed of the present sizes would have fitted in with such an ideal scale.

The present proposition so largely meets the requirements of the industry today without demanding changes from existing rims or change in type-producing plant, yet gives a programme so greatly simplified as to be calculated to give for all purposes satisfactory results. An ideal range would demand such sacrifices as would appear to be unwarranted by the difference between the present proposals and an ideal range of sizes.

In adopting the American standards for the straight side or wired type of motor tire, we clearly reach the simplest, if not, indeed, the ideal range, and should the future show us the ultimate survival of the straight side or wired type as against the beaded edge type, then the simplest possible range of standard will have been attained with the disappearance of the beaded edge type.

Sizes of tires of landing wheels for aircraft have not been dealt with in this scheme. The size standardization of this type of tire is now being dealt with by Aircraft Sub-Committee K of the British Engineering Standards Association.

In conclusion I would reiterate that the essence of the proposal is:

To provide tires of the overall diameters which the current types of vehicles demand, and where two or more very similar diameters are used to get vehicle makers to eliminate those less used, and for that particular type use only the one diameter wheel.

The schedules appended set out in detail the standardization of sizes proposed, together with some explanatory notes.

Cycle Tires

Schedule A

WIRED TYPE

Mark.	Rims. Size.	Tires. Size.	Percentage demand to total sales.
F.1	20x1½	20x1⅜	
F.2	22x1½	22x1⅜	3.92
F.3	24x1½	24x1⅜	
F.9	26x1½	26x1½	4.45
F.10	28x1½	28x1½	55.07
F.12	26x1¾	26x1¾	1.10
F.13	28x1¾	28x1¾	3.45
		add beaded edge	13.51
			81.5

Rims: 1 section only. 3 diameters for juveniles in 1⅜ in. 2 diameters for ordinary cycles in 1½ in. 2 diameters for 1¾ in. 20 in., 22in. and 24 in. rims made in 1½ in. section and 1⅜ in. circumference.

Tires: 7 different tires in all.

BEADED EDGE TYPE

Mark.	Rims. Size.	Tires. Size.	Percentage demand to total sales.
B.4	26x1½	26x1½	1.57
B.5	28x1½	28x1½	11.04
B.8*	28x1¾	28x1¾	.90
			13.51

Rims: 1 section only. 3 diameters only. 3 rims in all.

Tires: 3 different tires in all.

The range of sizes proposed covers 81.5 per cent of total demand.

Cycle Ribs for Wired and Beaded Tires: 10 rims instead of 33 at present in use.

Cycle Tires, Wired and Beaded Types: 10 different tires instead of 33 at present in use.

The gradual concentration of cycle production on a very limited number of types has already very largely simplified the tire program.

Over 66 per cent of the demand for cycle tires is for 28x1½ in. size, and the present is an opportune time to drastically reduce the number of separate rim diameters and sections hitherto used.

Schedule A provides for the use of only one section rim for the wired tires—the F section; and one section only for beaded edge tires—the B section.

There will be no alteration in dimensions of either tires or rims, simply the retention as British standards of the sizes of rims and tires set out in Schedule A. The following to be eliminated from present list of British standard rims:

For Wired Tires.—Section E: In all sizes rims E1 to E9. Section F: Rims No. F4, F5, F6, F7, F8, F11.

For Beaded Edge Cycle Tires.—Section A: Rims A1 to A3. Section B: Rims B1, B2, B3, and B7.

Motor Cycle Tires

Schedule B

Rims.—3 sections in all, 2¼ in., 2½ in. and 3 in. 5 diameters in all. 5 different rims in all against 20 different rims now listed.

Tires.—6 different tires in all, against 22 different tires now listed. Percentage of demand data not of much value under present conditions.

The wired type of tire and its rims are cut out entirely.

The D section of rim is retained for 24x2¼ in., and 26x2¼ in., and 26x2½ in. tires.

MOTOR CYCLE TIRES BEADED EDGE TYPE
Schedule B

	Rims.			Tires.
Mark.	Size.		Tire Seat. Rim. dia. at	
D.1	24x2¼		..... 64.174" cir. F.	24x2¼
D.2	26x2¼		..... 71.261" cir. F.	26x2¼
D.2	26x2¼		..... 71.261" cir. F.	26x2½
B.B.2*	28x2½	American	B.B.22.906"	28x2½
C.C.1**	26x3	American	C.C.20"	26x3
C.C.2*	28x3	American	C.C.21.875"	28x3

* American standards also.
** Also used for light cars.

The round base American section rims types B.B. and C.C. are adopted for 28x2½ in. and 26x3 in. and 28x3in. tires. These rims are much the better types for the larger sections and the higher powered machines, and give the advantage of interchangeability of tires with American made tires.

The actual dimensions of some motor cycle tires vary considerably on the baises marked on them. This is particularly the case in regard to the 26x2½in. on the D.2 rim, which is over 27 in. in overall diameter. The adoption of more accurate size marking is under consideration.

Light Car Tires

Schedule C

Rims.—2 sections only. 2 diameters only. 2 different rims in all instead of 8 rims in present list.

Tires.—2 normal size tires. 2 oversize tires. 4 different tires in all, instead of 8 tires in present list.

The present equipment for light cars is made up from the following four sizes:

	Per cent demand to total sales.
700x80	58.16
700x85	20.21
750x85	7.47
710x90	14.16

One of these tires fits the 65 mm. rim (700x80).

Two of these tires fit the same 90 mm. rim (the 700 x 85 and the 710 x 90), and one fits the 760 x 90 rim (the 750 x 85).

The varied types of tires made in these sizes give a most extraordinary difference in section widths and overall dimensions.

LIGHT CAR TIRES (PNEUMATIC) BEADED EDGE TYPE
Schedule C

Mark.	Description.	Circ. at Tire Seat. Mm.	Dia. at Tire Seat. Inch.	Mm.	New Standards. Descriptions in Inches and Mm.	Old Nominal Sizes.	Actual O/a Dia.	Actual Section.
L.C.I.	26x3 American C.C.	1595.9	20	508	26x3 & 660x 75	700x80	657 to 685	74 to 75
L.C.I.	26x3 American C.C.	1595.9	20	508	27x3½ & 690x 90	700x85	658 to 680	81 to 85
L.C.3.	28x3½ American D.	1677	21	534	28x3½ & 710x 90	750x85	734	81 to 85
L.C.3.	28x3½ American D.	1677	21	534	29x4 & 735x100	710x90	699	85 to 86

These standardization proposals have nothing to do with type or pattern, but some simplification of the present confusing tire and rim sizes is specially necessary in this case.

In the endeavor to reduce the number of rim sections, it does not appear that the 65 mm. section and the 3 in. American C.C. section rim are both required. The 3 in. American section is essential for the very largely used 28 x 3 in. motor cycle tire, and as tires made for the 65 mm. rim will fit equally well, if not better, on the 3 in. C.C. section rim (the 3 in. rim being slightly wider), it is proposed to drop the 65 mm. section and use the 3 in. American C.C. section. It should be noted that it is the C.C. or motor cycle section, not the 3 in. car section as used on Ford front wheels, that it is proposed to use.

Two rim diameters are required, the smaller corresponding almost exactly to 26 x 3 in. rim, which has a diameter of 508 mm. as against the present diameter for 650 x 65 rim of 509.29.

The present 700 x 80 mm. tire, which is the most popular of light car sizes, and is fitted to the 650 x 65 rim, will therefore fit this 26 in. x 3 in., and the tire could be described both as 26 x 3 in. and as a 660 x 75, the latter being only the more accurate description of the nominal 700 x 80.

On this same rim we can fit the oversize tire of 3½ in. or 90 mm. section. This would be better as a new tire described as a 27 x 3½ in. and 690 x 90, and would replace the 700 x 85 tire at present used, though the latter will give a reasonably satisfactory fit on this 26 x 3 in. rim.

For a larger wheel the 3½ in. American D section rim is adopted in place of the 90 mm. section rim. This course is taken because of the necessity of retaining the 3½ in. section rim in the range of rims for car tires, in which range it replaces the 90 mm. section rim. A 3½ in. rim for a 28 in. tire, with an oversize 29 x 4 in. tire, gives us a simple and satisfactory range of sizes for tires for light cars, two rims only, 26 x 3 in. and 28 x 3½ in., each rim taking a normal and an oversize tire, making four tires in all. It is proposed to mark them in inch sizes and the equivalent in mm., and at the same time retaining for the present the old nominal markings in addition, for purposes of identification. Schedule C shows against the tire sizes in inches, the mm. equivalents, which will constitute the new mm. markings.

For purposes of comparison, the table shows the four present principal light car sizes with their actual overall diameters and actual sectional measurements. It will be observed how greatly they vary in dimensions, and how far the dimensions are from agreement with the size markings on the tires. The proposition involves the making of some new moulds or alterations to existing moulds, but in this case this is unavoidable if anything like a reasonable range of sizes is to be produced.

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The 700 x 80 tire, which covers in itself nearly 60 per cent of the total demand for light car tires, fits a 26 x 3 in. rim perfectly, and no alteration to the tire or mould will be required, except that of adding the accurate size marking. The 700 x 85 tire will not satisfactorily fit either of the new rims, but moulds may be altered to 28 x 3½ in. The 750 x 85 must be dropped; 710 x 90 moulds will require alteration to 28 x 3½ in. or 29 x 4 in.

If wheels of still larger diameter are required, the demand is met by the 30 x 3½ in. and 31 x 4 in. from the standard car range.

Pneumatic Motor Tires

(See *Schedule D*)

BEADED EDGE TYPE

Rims: 4 sections only. 5 diameters only. 5 different rims in all only, instead of 20 rim sizes in present list.

Tires: 5 normal sizes. 5 oversize tires. 10 different types in all, instead of 62 tire sizes in present list.

Percentage of sales of non-standard sizes: 30 x 3, 11.83; 920 x 120, 6.21; 810 x 90, 3.66; 875 x 105, 2.86; 765 x 105, 1.48; 47 other sizes, 6.31—32.35; total, 100.00.

This schedule shows a provision of five different rims; each rim will take two tires, giving ten different tires in all.

An analysis of the demand for tires in the various sizes shows that of the total present demand nearly 68 per cent will be filled by these ten sizes of tires.

Of the balance of sales in sizes which it is not proposed to standardize: 11.83 per cent is for 30 x 3 in.; 6.21 per cent is for 920 x 120 mm.; 3.66 per cent is for 810 x 90 mm.; 2.86 per cent is for 875 x 105 mm.; 1.48 per cent is for 765 x 105 mm.; 6.31 per cent is for 47 other sizes.

Of these sizes, 30 x 3 in. is eliminated, because it is now removed from the range of American standards. It will, of course, be necessary to continue to supply for some time, as a replacement tire.

For 920 x 120 mm. the 80 x 120 mm. must be used.

For 810 x 90 (equivalent to 32 x 3½ in.) the nearest equivalent is 30 x 3½ in., 31 x 4 in., or 815 x 105 mm. (32 x 4 in.).

For 875 x 105 no near equivalent is provided. The size is not largely used, and it is not equivalent to anything in the American

MOTOR TIRES (PNEUMATIC) BEADED EDGE TYPE
Schedule D

RIMS					TIRES			
Mark	Description	Circ. at Tire Seat Mm.	Dia. at Tire Seat Mm.	Present Type Description Inch	Mm.	Average Actual Dimensions of Tires After Stretching 5% Sectional Width Dia. o/a Mm.	Sect. Width Mm.	Proposed New Marking for Types of Present Dimensions	Percentage Demand to Total Sales
M.B.1	30 x 3½ Amer. D section	1835	584	30 x 3½	—	770	90	30 x 3½ & 770 x 90	23.47
M.B.1	do.	1835	584	31 x 4	—	788	100	31 x 4 & 790 x 100	2.71
M.B.2	815 x 105	1924	612.4	—	815 x 105	815	100	— 815 x 100	14.44
M.B.2	do.	1924	612.4	—	815 x 120	841	115	— 840 x 115	2.62
M.B.3	820 x 120	1780	566.6	—	820 x 120	800	115	— 800 x 115	11.20
M.B.3	do.	1780	566.6	—	820 x 135	815	126	— 815 x 130	2.20
M.B.4	880 x 120	1980	630.2	—	880 x 120	863	115	— 865 x 115	6.76
M.B.4	do.	1980	630.2	—	880 x 135	878	126	— 880 x 130	1.26
M.B.5	895 x 135	1855	590.4	—	895 x 135	843	135	— 845 x 135	2.39
M.B.5	do.	1855	590.4	—	895 x 150	876	150	— 875 x 150	.60
									67.65

programme, in which the largest diameter for a 4 in. tire is 33 in. as against 34½ in., the diameter of the 875 mm.

For 765 x 105 the equivalent is 31 x 4 in.

The other 47 types it is hoped to see entirely disappear from use at an early date.

In preparing this schedule, the first consideration has again been to minimize firstly the number of rim sections, and secondly the number of rim diameters.

The 3½ in. American section being essential, the 90 mm. section is dropped in favor of the 3½ in., all 90 mm. tires fitting equally well the 33½ in. section, though inch size tires will not satisfactorily fit the 90 mm. section.

It is proposed that no alterations should be called for in the manufactured dimensions of the tires, and a schedule of average actual dimensions of the tires is given, in which an allowance for "stretch" is included, so that the dimensions may be taken as the average dimensions of the tires as in use. This is taken as a guide for determining the proposed new markings.

Chart D.1 gives the complete range of overall tire diameters provided, showing their relation by average actual measurements.

Motor Tires (Pneumatic)

Schedule E

WIRED TYPE

S.A.E. Standards.

Propose adding mm. equivalents in. tire marking.

RIMS

Description Straight Side S.A.E. Standards	Dia. at tire seat
32 x 3½ All tires are full size, both as to	
33 x 4	25 in.
34 x 4½	25 in.
Do.	25 in.

SPECIAL SIZES FOR LORRIES OR TRUCKS

36 x 6	24 in.
38 x 7	24 in.
40 x 8	24 in.

TIRES

Description	
32 x 3½	All types are full size, both as to section and o/a dia.
33 x 4	All rims are of same diameter and any size tire will go on to any size
34 x 4½	rim, though extremes are undesirable, such as a 5 in. tire on a
35 x 5	3½ in. rim and vice versa.

SPECIAL SIZES FOR LORRIES OR TRUCKS

36 x 6	All tires are full size both as to section and o/a diameters.
38 x 7	All rims are of same diameter.
40 x 8	

The American range of standards is adopted, British tire manufacturers being not yet committed to the manufacture on any scale of this type of tire. Acceptance of the American standards now will avoid the introduction of any unnecessary sizes, and secure eventually in all probability a simple range of international standards for this type.

Solid Rubber Tires

Schedule F

PRESSED ON BAND TYPE

Millimeter sizes. Wheel rim dia.	Tire sections.
670 mm.	160, 180 mm.
720	90, 100, 120, 140, 160, 180 mm.
771	100, 120, 140, 160, 180 mm.
850	100, 120, 140, 160, 180 mm.

Sections larger than 180 mm. to be made to 850 mm. diameter only.

Taking 881 and 850 mm. diameter wheels together, the sizes shown cover nearly 80 per cent of the present demand for solid tires.

Inch sizes, as adopted by the War Service Committee, U. S. A. (Division Solid Tires), July, 1918

Overall tire dia.	Tire sections.
32 in.	3, 3½, 4 in.
36 in.	4, 5, 6, 7, 8, 10 in.
40 in.	5, 6, 10, 12, 14 in.

Present British standard rim diameters only are retained. The 741 mm. diameter—one of the starred present standards—is dropped, and it is proposed to make in 670 mm. diameter two sections only—the 160 mm. and 180 mm. tires for front wheels of heavy steamers.

It is proposed to retain one only of the two diameters, 850 or 881 mm.

The balance of advantage seems to lie with the retention of the 850 mm. diameter, particularly as this diameter will bring us into line with Continental practice in the event of international standardization, the 881 mm. not being used to any extent on the Continent.

The difference between the two diameters, of 850 and 881 mm., is so small that the retention of the two cannot be justified.

The only advantage in favor of the 881 mm. diameter is that of being the larger, but it is so very slightly larger than the 850 mm. that it does not constitute a reasonable step in increase of diameter. The 850 mm. diameter is essential, and if a larger wheel is required it should not be less than 900 mm. A half-worn tire of an 881 mm. diameter wheel becomes of less overall diameter than a new 850 mm. diameter tire.

Provision is made for the possible adoption of large single solids in lieu of twin tires on rear wheels, and it is proposed to limit the making of these tires to 850 mm. diameter only.

For inch sizes the American standard range is adopted in its entirety.

Valves

Schedule G

A uniform valve stem diameter of 0.310 in. for all cycle and motor cycle tires from 1⅜ in. to 3 in. or 75 mm. inclusive.

Valve holes in rims to be of 0.325 in. diameter with two flat sides.

A uniform valve stem diameter of 0.488 in. for all light car and car tires from 3 in. or 75 mm. to 3½ in. or 150 mm. inclusive.

Valve holes in rims to be of 0.488 plus 1/32 in. diameter with two flat sides.

It was unanimously resolved that makers of valves be asked to adopt one uniform thread for connection to pumps, uniform threads on valve stems, and a limited range of uniform valve stem lengths.

Tire Manufacturers to Meet

To form new divisions of the Rubber Association of America, which, it is intended, will carry on the work of standardization of tire sizes started by the War Service Committee of the Rubber Industry and the Conservation Division of the War Industries Board, Harry S. Vorhis, secretary of the Association, has sent out invitations to all pneumatic tire and tube manufacturers, and to all solid tire manufacturers to attend luncheons in New York City on January 15 and 16, whether members of the Association or not. The solid tire manufacturers will meet at the Yale Club on January 15, and the pneumatic tire and tube men will meet at the Hotel McAlpin on January 16, the day of the annual meeting and banquet of the Rubber Association.

General Increases Capital

(*Special Akron Correspondence*)

The stockholders of the General Tire & Rubber Company have approved action of the board of directors to increase the capital stock from $1,000,000 to $2,500,000. The additional capital will be used to erect new buildings and install machinery which will greatly increase production.

"Sales for 1918 are $3,000,000, an increase of 125 per cent over the previous year," W. O'Neil, vice-president and general manager, said. "We anticipate doubling this volume in 1919 and reach $6,000,000 net sales."

The stockholders elected the following directors: M. O'Neil, W. O'Neil, T. F. O'Neil, W. E. Fouse, G. F. Burkhardt, W. L. Beckley and J. A. Diebolt.

The following officers were named: M. O'Neil, president; W. O'Neil, vice-president; W. E. Fouse, secretary, and Charles Herberich, treasurer.

Firestone Promotes Lindeman

The Firestone Tire & Rubber Company, Akron, Ohio, has sent C. B. Lindeman and J. E. Mayles, from the factory to take charge of its interests in New England. Mr. Lindeman will have charge of the whole New England district, while Mr. Mayles will be the Boston zone manager. J. T. Clinton, who has been in charge of the New England territory for Firestone for two years, has resigned.

ANNUAL BANQUET OF GENERAL TIRE AND RUBBER COMPANY, AT THE CITY CLUB, AKRON, OHIO

Happenings of Interest to Tire Men

Government Tire Purchases—Firestone Banqueted by Employes—Banner Year Predicted by Goodyear President—Bonus for Swinehart Employes —Mason and General Dividends—Norwalk Gives Thrift Stamps— New Cord Fabric Plant

Government Contracts Placed

The following contracts were placed by the Motors Division, Quartermaster's Department, since the signing of the armistice, and have been approved by the Board of Review:

NOVEMBER 26, 1918

Swinehart Tire & Rubber Co., Akron, 100 casings, $23,421.50; American Chain Co., Bridgeport, 100 skid chains and 30,000 cross chains, $15,750; Federal Rubber Co., Cudahy, Wis., 5250 ft. 2 in. I. D. 3-ply radiator hose, 4125 ft. 1¾ in., $1,792.50; B. F. Goodrich Rubber Co., Akron, 11,995 casings, $252,784.55; B. F. Goodrich Rubber Co., Akron, 7015 casings, $57,172.25; United States Tire Co., New York, 14,025 casings, $114,303.75; Goodyear Tire & Rubber Co., Akron, 7675 casings, $80,587.50; Fisk Rubber Co., Washington, 7070 casings, $74,235; United States Tire Co., New York, 6160 casings, 30x3½ nonskid clincher, $64,680; Kelly-Springfield Tire Co., Akron, 10,000 casings, 30x3½ nonskid clincher, $105,000; Fisk Rubber Co., Washington, 1156 36x6 cord casings, $63,695.50; Kelly-Sprinfield Tire Co., Cleveland, 1218 36x6 casings, $67,111.80; Kelly-Springfield Tire Co., Cleveland, 578 36x6 cord casings, $31,847.80; B. F. Goodrich Co., Akron, tubes, $26,725.40; Fisk Tire & Rubber Co., Washington, 5650 30x3½ clincher casings, $59,325; Pennsylvania Rubber Co., Jeannette, 1500 30x3 CNS fabric casings, 4500 30x3 CNS fabric casings, 250 31x4 CNS fabric casings, $64,220; Goodyear Tire & Rubber Co., Washington, 16,500 casings, $134,475; United States Tire Co., New York, 2312 36x6 casings, $127,160; Firestone Tire & Rubber Co., Washington, 8000 30x3½ casings, $84,000; Kelly-Springfield Tire Co., Washington, 3000 casings, $31,500; The United States Tire Co., New York, 2000 casings, $43,780; United States Tire Co., New York, 14,850 tires as per list, $253,218.50; Swinehart Tire & Rubber Co., Akron, solid pressed-on tires, $113,759.10; Fisk Rubber Co., Chicopee Falls, solid pressed-on tires, $167,942.20; Goodyear Tire & Rubber Co., Akron, 300 tires 36x3½, 650 tires 36x5, 1000 tires 36x10, 700 tires 34x7, $135,002; Republic Rubber Co., Youngstown, 300 tires 36x5, 700 tires 36x6, $38,380; Firestone Tire & Rubber Co., Akron, solid pressed-on tires, $269,890.40; Firestone Tire & Rubber Co., Washington, red tubes, $26,676; United States Tire Co., New York, 5000 30x3½ casings, $52,500; B. F. Goodrich Rubber Co., Akron, 19,100 brown tubes, $36,397.40; United States Tire Co., New York, 6565 casings 33x4 SSNS cord, $161,302.05; B. F. Goodrich Rubber Co., Akron, gray tubes to be equipped with regular MCH Schroder valves, $26,725; Goodyear Tire & Rubber Co., Akron, casings, $258,597.05.

DECEMBER 3, 1918.

Goodyear Tire & Rubber Co., Washington, 14,800 casings, 16,200 tubes, $139,898; B. F. Goodrich Rubber Co., Akron, 9795 casings, $240,663.15; Kelly-Springfield Tire Co., Cleveland, 4400 casings, $35,860; B. F. Goodrich Rubber Co., Akron, solid pressed-on tire, $148,512.40; Firestone Tire & Rubber Co., Washington, 22,200 casings, 20,250 tubes, $205,027.50; B. F. Goodrich Co., Akron, 2262 36x6 casings, $124,590.96; B. F. Goodrich Co., Akron, 1445 cord casings, $79,590.60; Fisk Rubber Co., Chicopee Falls, casings, $74,578.20; Goodyear Tire & Rubber Co., Washington, 6565 casings, $161,302.05.

Employees Banquet H. S. Firestone

Harvey S. Firestone, president of the Firestone Tire & Rubber Company, Akron, Ohio, was tendered a complimentary banquet, December 20, to celebrate his 50th anniversary. The hosts were the foremen, department managers, factory managers and executives of the Akron organization. Were present as guests beside Mr. and Mrs. Firestone: Harvey S. Firestone, Jr., just returned from his duties as Flight Officer with the Naval Reserve Flying Corps, Russel, Leonard, Raymond, Roger and Elizabeth Firestone.

Between six and seven hundred people sat down to dinner in the auditorium of the Firestone Club House, Firestone Park. The Firestone orchestra provided the music.

A feature of the banquet was the cutting of a large birthday cake on which 50 birthday candles burned, and which was brought into the auditorium by two of Mr. Firestone's younger children.

J. W. Thomas, General Superintendent, filled the role of toastmaster and in his opening remarks recounted some of his early experiences with the company and with Mr. Firestone. He traced the growth of the organization from his entrance to the present time. He said that if a good many men could see the monument which would be erected to them after their death, they would refuse to die, and that Mr. Firestone had deemed it better to commence the building of his memorial in early life—hence the Firestone organization. Mr. Thomas intimated that Mr. Firestone had not by any means finished the building yet.

A. G. Partridge, general sales manager, who has been with the organization over 13 years, spoke of the early days of his connection when the number of employees approximated 100, and when the pneumatic tire industry was in its infancy. He recounted the pleasant associations with Mr. Firestone which he had had and humorously mentioned some of his duties as sales manager when a consignment of pneumatic tires would be available for him to sell. Mr. Partridge referred to the fact that Mr. Firestone had been in the habit of holding family gatherings on the occasion of his anniversary each year, at which the same cake ceremony was duly observed. This year Mr. Firestone was still holding the family gathering, but this time it included, not only his personal family, but his business family as well.

Dan Goodenberger, who has also been with the company a good many years, talked of the growth of the organization and presented Mr. Firestone with a jeweled scarf pin. Mr. Firestone in reply spoke with a great deal of feeling of the happy associations and fine spirit which had always permeated the organization and of his appreciation at being honored by this celebration of his 50th anniversary. He did not refer to what the Firestone company had accomplished in a material way, but confined his remarks to reminiscences of his experience. He spoke of the early days on the farm when he had the same feelings, the same joys and sorrows of others who lived the same life. There are just a few simple things in life which are really worth while. People find their greatest happiness by holding fast to their ideals and not by chasing the modern butterflies of pleasure, power and money. Sometimes it was hard to adjust one's self to that which is new and attractive. Mr. Firestone urged his hosts to keep themselves balanced and not to become slaves of a single idea.

Lieut. H. K. Black, C. F. A. R. F. C., of the news division of the Firestone company, spoke briefly on two or three sidelights of the war. During the course of the program he also sang several songs.

Seiberling Predicts Banner Year

(Special Akron Correspondence)

F. A. Seiberling, president of the Goodyear Tire & Rubber Co., speaking at a recent luncheon of the Kiwanis Club here, predicted that 1919 would be a most prosperous year for Akron. In part he said:

"The reconstruction period will not affect Akron. We are going back to a peace basis from war times without noticing the change.

"Neither will the salary readjustments touch us here. Akron has always paid good salaries. As a result there were no substantial increases during the war, which means there will be no reductions now.

"The rubber companies will need 10,000 more men in 1919 than we had at the close of the last year. Employment of men in such large numbers means rapid growth of the city. Growth means real estate business.

"The rubber factories are preparing to work to capacity throughout the coming year."

Swinehart Pays Bonus

(Special Akron Correspondence)

The Swinehart Tire & Rubber Company has announced that additional compensation of 20 per cent of their yearly salary has been paid to all salaried employes. While this is the first distribution of this sort made by the company, it is expected that the officers and board of directors early in the present year will formulate some permanent plan of a similar character to be adopted and put into effect.

Rubber Company Dividends

The Mason Tire & Rubber Company, Kent, Ohio, has declared an initial 6 per cent dividend, payable in three installments of 2 per cent each, to shareholders of record January 31. Payments will be made on February 20, May 20 and August 20.

The General Tire & Rubber Company, Akron, Ohio, has declared a regular quarterly dividend of 1¾ per cent on its preferred stock.

Norwalk Remembers Employes

With the usual Christmas wishes to its employes the Norwalk Tire & Rubber Company, Norwalk, Conn., this year, added substantial evidence of its goodwill in the form of War Savings Stamps. Everyone of the Norwalk employes, of which there are more than 500, was remembered without respect to length of service.

New Cord Fabrics Plant

Frederick F. Fowler, president of the Westerly Textile Company, Westerly, R. I., is to organize immediately a new company to manufacture special fabric for cord construction tires.

Mr. Fowler has purchased a mill at Stillmanville and is acquiring machinery and other equipment to be installed in this plant.

MARKETS

Manufactured Rubber Goods

NEW YORK, January 9, 1919.

The new year opens with trade conditions improving and the rubber business showing increased activity. It is generally believed that the buying of rubber goods will become more active as soon as dealers are through taking their inventories this month.

The readjustment of the financial, industrial and commercial machinery of the country to peace conditions is still the absorbing question of the hour. The most far-seeing minds in the financial and business world do not hesitate to predict that when the transition has been accomplished there will be inaugurated in this country a period of unparalleled progress and prosperity.

To solve the unemployment problem which confronts us the Department of Labor has plans to stimulate building, both private and public, especially in large centers where the demand for employment will be largest and where important building projects have been held up on account of the war. Other branches of the Government have promised their cooperation.

The nineteenth annual New York Automobile Show, scheduled for February 1—15, is exceeding all expectations as regards magnitude, and reports from other centers where similar shows will be held indicate the same state of affairs.

From what can be learned in and about the trade, the progress that has so far been made on inventories by wholesale and retail merchants shows stocks generally are smaller than had been supposed to be. During the past three or four months both wholesale and retail merchants have been very slow in placing orders and have been exerting all of their energies in filling customers' requirements, buying mostly on a hand-to-mouth basis for this purpose. Another cause for the depleted state of stocks has been the fact that many shipments were held up because manufacturers could not furnish goods, due to restrictions and to the heavy Government demand. The releasing of manufacturers from Government contracts has helped out the situation to a considerable extent, but on account of the very low stocks on hand in jobbers' warehouses, there has been more than the usual amount of trading between dealers in the swapping of certain lines of goods.

All in all the year 1918 has proved a very satisfactory one. During the first half of the year there were many urgent requests for shipments of various rubber products that in many cases the manufacturers and jobbers were not able to fill. But by careful distribution most of these urgent requests were taken care of in a fairly satisfactory manner, and an unprecedented volume of business was done.

MECHANICALS

There are not a few people who are quite skeptical as to the future of mechanical goods prices, although many who are in a good position to know do not believe there will be any material decline in values. However, generally speaking the retail trade feels that prices will go lower and the result is that business in this line is slow.

As restrictions have been removed from building operations, and as the Government is urging private firms, States and municipalities to undertake building activity without delay, good business can be expected in mechanical lines used in connection with construction work. It is estimated that the country is a whole year behind in its building program and that it will require more than three billion dollars to catch up.

TIRES

As before stated, the prospects are that this year will be the largest in the history of the tire trade, and that competition for the business will be keener than ever before. This latter fact is reflected in the preparations being made by manufacturers' sales organizations, by the activity of dealers, and by the interest taken in automobile shows. Reports from retail sources indicate that business now is as good or better than a year ago. There are no changes in prices to report and none are likely to occur before manufacturers have consumed their stocks of raw materials.

DRUGGISTS' SUNDRIES

Dealers in druggists' sundries are buying carefully and slowly, and while they do not look for any sudden reduction in prices, the majority of them feel that a gradual readjustment will take place, and they are holding back until this comes to pass. Jobbers express the belief that many shortages will prevail in the spring due to this reluctancy of dealers to place orders for future delivery, on goods actually needed for trade at that time.

Collections are reported to be good; retail sales are satisfactory, and a heavy spring and summer business is predicted.

Cotton, Yarn and Fabrics

NEW YORK, Jan. 9, 1919.

The market for spot cotton has showed a strong tone during the past two weeks and prices have been little changed for prompt delivery stock, although futures have fluctuated wide, with the general trend a little downward. Several breaks in the Liverpool market have been reflected here, but the losses have usually been regained. The English market is showing weakness in anticipation of heavier shipments from the American market. The cost of getting cotton to England has been materially lessened since the end of the war, first, by the cutting of ocean freight rates, and, secondly, by the abolition of war risk insurance. Normally there is a difference from 1 to 2 cents per pound in the price of cotton in New York and Liverpool, but during the war this difference has averaged 10 cents, going higher at times. The English market will have to suffer more losses still if the two markets are to be restored to their pre-war parity. Reports circulated on the Cotton Exchange forecast further reductions in ocean freight rates. English interests have been alloted space for 275,000 bales during this month, and it is believed that the export movement of cotton will steadily increase as more ocean tonnage is released from war uses.

In addition to British buying, trade interests and a French commission have been buying on a fairly large scale, and these factors have tended to keep the spot market in a firm condition. In some quarters of the market, however, the view is expressed that cotton prices must give way soon, as all other commodity prices are slowly falling. It was also pointed out that the expected rush to the American market by European markets has as yet failed to materialize, and it is believed that foreign countries are not financially able to lay in the supplies of cotton they need. Should the export situation remain in its present undeveloped condition during the present season, they point out, growers will be forced to hold over a good part of their crop for next season. There are really two sides to the cotton market at the present time, an optimistic one which looks for record export buying, and a pessimistic side which looks for a small export movement and lower prices.

SEA ISLAND COTTON

The market for Sea Island cotton is reported to be in a very unsettled condition, and brokers are not quoting prices due to this cause. The market is unusually quiet, with but very little business being done. Most of the sales now being effected are so-called "distress offerings" of growers who find that they must realize immediately on their holdings to keep their business going. Values, while nominal, are around 75 cents per pound, first cost interior points. Advices from Savannah indicate that brokers believe prices will go higher, as the growers still hold the bulk of the new crop.

EGYPTIAN COTTON

There have been no recent arrivals of Egyptian cotton, and up to the time of writing there have been no shipments started towards this country from the Egyptian market. Stocks held here at the present time are almost negligible. Morocco is the latest country to have taken up the cultivation of cotton, and some Egyptian cotton has been planted in the plain of Rio Martin, according to the report of the British vice-consul at Tetuan, Morocco. It is believed that the cultivation of the Egyptian staple would be practicable in Morocco, as the climate is suitable.

FABRICS

The fabrics market at the present time is in a transitory state, with the trade trying to establish new price levels at which to trade. The Government's cancellations have upset the market considerably, and demand is dull, with but a few transactions reported from here and there. While the Government still has huge supplies of various fabrics on its hands, it has given assurances that these supplies will not be dumped upon the market at one time, but will be sold through the Quartermaster General's office in small lots from time to time, so that the sale will not have any weakening effect on the market.

TIRE FABRICS

There has been no change reported in conditions in the market, and although dealers are still offering fabrics to the trade there is not much of a demand reported by them. Prices remain unchanged at $1.55 @ $1.60 for the Sea Island combed, $1.25 for the Egyptian combed, $1.35 for the Egyptian carded, $1 for the carded peelers, and $1.10 and $1.15 for the combed peelers.

HOSE AND BELTING FABRICS

Trading is dull and the market is trying to get back into a somewhat more normal condition. The Government is still taking all of the webbing produced in the country and is buying canvas and other fabrics used in the trade. Civilian business is still practically at a standstill, and the opinion is held in the trade that the return to a pre-war basis will be very gradual.

DRILLS, SHEETINGS AND OSNABURGS

Signs of activity are seen in the market and new price levels have been established considerably below the Government maximum prices prevailing during the war. The new prices are more or less nominal, as the trade is endeavoring to establish a level, and sales are reported both above and below the prices given below, which serve only as a guide to the market. There have been several sales of sheetings and drills reported during the past few days at the prices given below and the market is showing more activity.

BURLAPS

Local importers are engaged in feeling out the Calcutta market before resuming activities in the market, and trading now is of a quiet nature. All war-time restrictions on the burlap market will be withdrawn on Jan. 31, when the industry will return to the footing on which it was operated previous to Oct. 4, when the Government first showed signs of regulating the trade. For the past two months the Government has acted as import agent in bringing supplies of burlaps to the American market, and although domestic supplies in the hands of importers are low it is expected that the increased demand for burlaps expected within a short time will be met by supplies now held by the Government. Selling prices at present are a trifle under Government maximums, with the market in a rather dull state.

New York Quotations

Prices given below are subject to change without notice.

TIRE FABRICS

17¼-ounce Sea Island, combed,	sq. yd.	1.55@1.60
17¼-ounce Egyptian, combed		1.25@....
17¼-ounce Egyptian, carded		1.35@....
17¼-ounce Peelers, carded		1.00@....
17¼-ounce Peelers, combed		1.10@1.15

DUCKS

*Single Filling (pound basis)	lb.	.78
*Double Filling (pound basis)		.79

DRILLS

37-inch	2.35-yard	yd.	.21
37-inch	2.75-yard		.20¼
37-inch	3.00-yard		.19¼
37-inch	3.25-yard		.17¼
37-inch	3.50-yard		.16¼
37-inch	3.95-yard		.15½
37-inch	2.00-yard Southern	lb.	.75
38-inch	2.00-yard Northern		—
40-inch	2.40-yard Southern		60.94
40-inch	2.40-yard Northern		60.94
52-inch	1.90-yard Southern		61.79
52-inch	1.90-yard Northern		61.79

SHEETINGS

40-inch	2.35-yard	yd.	.20
40-inch	2.50-yard		.19½
40-inch	2.85-yard		.19
40-inch	3.00-yard		.17½
40-inch	3.25-yard		.17
40-inch	3.75-yard		.16
40-inch	3.60-yard		.16¾
40-inch	4.25-yard		.14¼

BURLAPS

(Spot Carload Lots)

†40-inch	8-ounce	West Coast	13.60@——
†40-inch	8-ounce	East Coast	14.00@——
40-inch	10-ounce		15.00@15.50
†40-inch	10½-ounce	West Coast	16.00@——
†40-inch	10½-ounce	East Coast	16.50@——

* Maximum prices as established by the War Industries Board.

† F.o.b. dock.

Chemicals and Compounding Materials

NEW YORK, January 9, 1919.

Quietness still prevails in the market for chemicals and whatever buying is noted is for small lots and merely to cover important and urgent needs. The market is still in a waiting attitude, and is not yet in a position to resume pre-war conditions. While a fairly good demand for materials on contract to cover this year's requirements were reported in some directions, most factors in the market reported that even this demand was slow in coming in and that their regular contract customers were apparently satisfied to await still further developments and to withhold their business until more satisfactory values were obtainable, or until they were satisfied that the market had adjusted itself to the new peace conditions.

Manufacturers are pointing out that they are still forced to meet the increased costs of raw material in nearly every line and that there has been no decline in the costs of labor and overhead, and that none of these can be expected to occur within several months. Owing to some increase in pressure from holders of resale material the preponderance of values shows an easier trend, and only a few items of the list, like turpentine and cornstarch under special conditions in those materials closed higher.

ANILINE OIL

The demand for aniline oil continues to be light. The turn of the year has not as yet had its effect on the market, but producers are quoting on the basis which they will demand for their 1919 business. They anticipate the resumption of trading on a less limited scale early in the year, and are not inclined to offer any inducements for immediate business. There has been no change in the quotations which are still at 27 @ 30c. per pound for the ordinary grade.

BARYTES

There is a slow demand for barytes just now, and producers do not expect much improvement for several weeks. Next month there should be an active demand. There has been no reduction in the cost of labor or transportation as yet, and therefore it is difficult for producers to see their way clear to cut prices. The leading producers are still quoting 22 f. o. b. mill in bulk.

BENZOL

The strengthening of the prices reported in the market for benzol at the close of the trading last week could not be maintained. The increased demand which was noted at that time was more or less spasmodic and the result of the slight advance in price was to quiet the market and bring it back to its former position of dullness and weakness. Prices were heard during the week just passed down to 22c. per pound with an absence of any trading of importance.

CAUSTIC SODA

Second hands continued to force the market in this commodity and small lots were reported to have been sold at considerable concessions from the prevailing prices. One offer of the 76 @ 78 per cent. material in bags was reported at $3.50 per cwt. The prevailing quotation for spot business was somewhat higher. Several transactions were heard at $3.60 for this grade of the goods, with the range from that figure up to $3.70 per cwt.

DRY COLORS

It is too early after the holidays to notice any material change in the dry color market. The outlook for an improving demand from now on, however, is decidedly good. In some lines there is a disposition on the part of consumers to hold back for lower prices, but if there should be any real demand, the price question would not be a serious one. As a rule prices hold steady and are unchanged.

LINSEED OIL

The price of linseed oil remains unchanged at $1.55 in carload lots. It has been held right there so long that the trade is beginning to lose interest. Crushers do not seem to care much whether they do business or not, at least they do not care enough to make a test of the market to see if a shading of the price would result in an increased demand.

LITHOPONE

There have been fewer contracts made for delivery during the first quarter of the year than was expected. The announcement of the first quarter prices to take effect before the end of the year had but little effect on the situation. Producers have little cause to worry over the outlook, as they have small stocks on hand, and the spring demand is practically certain to absorb all the available supply as it always has done.

ROSIN

Despite the talk about export demand, the rosin market continues to be a very quiet affair. It is true that there is some rosin to be sent to South America as soon as it can be moved, and that there seems to be the promise of a great deal more business from this source and there will also be some shipments to England shortly. The export demand, however, is not great enough to make an active market at a time when the domestic demand is very light. The price is at last a fair one in spite of the fact that here has been a reaction of $2.50 a barrel from the extreme high.

CORN STARCH

Leading producers advanced their views 23 points and the market followed

these producers closely. The quoting for powdered corn starch is now raised to $4.12 @ $4.34 per 100 lbs. There has been a continued good inquiry for export in the starch group and considerable business of this kind has been closed.

TURPENTINE

Turpentine under an active demand in the New York market advanced to 73c. a gallon. The undertone is strong as there has been no pressure of turpentine for sale. Holders are looking forward to further improvement, both in the export and the domestic demand in the near future and the advance of the last week may be attributed to an effort to discount this expected improvement.

WHITE LEAD

The fact that there is little demand just now, and that the pig lead market is in an unsettled condition, has made producers hesitate about announcing any change in prices, but there is a report in the market that new prices for lead pigments may be expected in a week.

Prices Current for Chemicals, Fillers, Colors, etc.

Acetone	lb.	.20	@	.20¼
Accelerator, in drums	lb.	.85	@	1.00
Acids, Acetic, 56%	lb.	9.32	@	9.57
Carbolic, C. P.	lb.	*.20	@	.30
*Cresylic, 95%	gal.	1.15	@	1.20
Muriatic, 20 deg.	lb.	.02¼	@	.02½
Muriatic, 22 deg.	lb.	.02¾	@	.03
Nitric, 42 deg.	lb.	.08½	@	.08¾
Nitric, 40 deg.	lb.	.07¾	@	.08¼
Sulphuric, 60 deg.	ton	16.00	@	22.00
Tartaric, crystals	lb.	.81	@	.85
Aluminum Flake	ton	29.00	@	31.00
Aniline oil, bulk basis	lb	.26	@	.28
Antimony, metal spot	lb.	7.25	@	7.50
Oxide	lb.	15.00	@	16.00
Sulphuret, red	lb.	.25	@	.26
Sulphuret, golden	lb.	.28	@	.30
Sulphuret, crimson	lb.	.45	@	.47
Asbestos	ton	35.00	@	45.00
Asphaltum, Egyptian	lb.	.20	@	.25
Domestic	ton	22.00	@	30.00
Barium sulphate, technical	lb.	.04½	@	.05
Sulphide	lb.	.07¼	@	.07½
Barytes, prime white imported	ton	*40.00	@	45.00
white, domestic	ton	32.00	@	35.00
off color, domestic	ton	22.00	@	24.00
Benzol, pure, bulk	gal.	.22	@	.27
Beta-naphtol, sublimed	lb.	.75	@	.80
unsublimed	lb.	.55	@	.60
Blacks, Drop	lb.	.05½	@	.15
Ivory	lb.	.16	@	.30
Carbon, gas, cases	lb.	.16	@	.25
Lampblack, R. M.	lb.	.14	@	.18
Mineral blacks	ton	35.00	@	45.00
Blues, Prussian	lb.	1.10	@	1.15
Soluble	lb.	1.15	@	1.20
Ultramarine	lb.	.14	@	.30
Browns, Umber, Turkey, burnt, powdered	lb.	.05	@	.07
American, burnt	lb.	.03½	@	.04
Cadmium sulphide, yellow	lb.	2.00	@	2.25
Carbon, bisulphide, bulk	lb.	.08	@	.08½
tetrachloride, drums	lb.	.16	@	.18
Caustic Soda, 76@78%	lb.	3.60	@	3.70
Chalk, precipitated, extra light	lb.	.05¼	@	.05½
light	lb.	.05	@	.05¼
heavy	lb.	.04	@	.04¼
China clay, domestic	ton	15.00	@	22.50
imported	ton	*20.00	@	40.00
Fossil flour	lb.	.03¾	@	.05
Gilsonite	ton	50.00	@	55.00
Glue, extra white	lb.	.36	@	.45
medium	lb.	.31	@	.35
low grade		.21	@	.27
Glycerine, C. P. (drums)	lb.	.20	@	.21
Graphite, flake (bbl.)	lb.	.18	@	.20
powdered (bbl.)	lb.	.13	@	.15
Green, chrome, R. M.	lb.	.14	@	.20
Ground glass (fine)	lb.	.03½	@	.04
Hexamethylene	lb.	1.05	@	1.10
Infusorial earth, powd'd.	ton	60.00	@	—
bolted	ton	70.00	@	—
Iron oxide, red, reduced grades	lb.	.07	@	.08
red, pure, bright	lb.	.15	@	.20
Lead, red, dry (casks)	lb.	.11½	@	.11½
sublimed	lb.	.09¾	@	.09¾
white, basic carb.	lb.	.10	@	.10½
white, basic sulp.	lb.	.09¼	@	.09¾
Lime flour	lb.	.01¾	@	.02
Litharge (casks)	lb.	.10¾	@	.11¼
English	lb.	*.12	@	.13
Lithopone, domestic	lb.	.07¾	@	.08¼
Magnesia, carbonate	lb.	.16	@	.17
calcined, heavy	lb.	.12	@	.14
calcined light	lb.	.70	@	.75
Magnesite, calcined, pwd.	ton	50.00	@	65.00
Mica, powdered	lb.	.04¾	@	.05
Mineral rubber (asphaltum base)	ton	80.00	@	115.00
Naphtha, motor gasoline, (steel bbls.)	gal.	.24½	@	—
68 @ 70 degrees (steel bbls.)	gal.	.30½	@	—
70 @ 72 degrees (steel bbls.)	gal.	.31½	@	—
73 @ 76 degrees (steel bbls.)	gal.	.33½	@	—
machine (wood bbls.)	gal.	.41½	@	—
Oil corn, crude	cwt.	17.75	@	18.00
corn, refined	cwt.	21.47	@	21.67
linseed (bbls.)	gal.	1.55	@	1.56
palm, Lagas	lb.	*.30	@	.40
pine, yellow	gal.	.57	@	.59
rapeseed, refined	gal.	1.75	@	1.80
rapeseed, blown	gal.	1.80	@	1.85
rosin, first rectified.	gal.	.80	@	.82
tar (commercial)	gal.	.35	@	.36
Orange mineral, American.	lb.	.14¼	@	.15¼
imported	lb.	*.15	@	.20
Paraphenylenediamine	lb.	3.50	@	4.00
Petrolatum, bbls., amber.	lb.	.06	@	.07
pale yellow	lb.	.06½	@	.07½
Pine tar kiln	bbl.	13.00	@	
Pitch	bbl.	8.00	@	8.25
Plaster of paris	bbl.	2.00	@	3.00
Red, Tuscan	lb.	.25	@	.30
Indian (reduced)	lb.	.08	@	.10
Standard	lb.	.12	@	.16
Rosin (common to good) @ 280 lbs.	bbl.	14.10	@	..
Rotten stone, powdered.	lb.	.02½	@	.04½
Rubber, substitute, black.	lb.	.13	@	.17
white	lb.	.15	@	.24
brown	lb.	.20	@	.25
Shellac, fine orange	lb.	.65	@	.66
T. N.	lb.	.58	@	.59
Bleached ordinary	lb.	.57	@	.58
Bleached bonedry	lb.	.67	@	.68
Silex (silica)	ton	22.00	@	40.00
Soapstone, powdered	ton	15.00	@	25.00
Starch, corn, powdered	lb.	4.12	@	4.34
Sulphur, crude	ton	*50.00	@	..
refined, flour, per 100-pounds in bbls.		3.35	@	3.90
roll		3.20	@	3.65
commercial superfine		2.50	@	3.00
Talc, American	ton	20.00	@	40.00
French	ton	*30.00	@	35.00
Toluol, pure, in drums	gal.	.25	@	.35
Tripolite earth	ton	60.00	@	70.00
Turpentine, pure gum—spirits	gal.	.73	@	.74
wood	gal.	.59	@	.60
Venice, artificial.	gal.	.13	@	.14
Vermilion, English	lb.	2.00	@	2.10
Wax, beeswax, crude yel.	lb.	.40	@	.42
ceresin, white	lb.	.19	@	.20
carnauba, No. 3	lb.	.64	@	.66
Montan	lb.	*.35	@	.40
ozokerite, black	lb.	*.65	@	.70
ozokerite, green	lb.	*.80	@	.90
Paraffin, refined, 118/120 M. P. (bbls.)	lb.	.12¾	@	.13
Paraffin, 123/125 M. P.	lb.	.13	@	.13¼
128/130 M.P.	lb.	.13¼	@	.13½
135/136 M.P.	lb.	.15¼	@	.15½
Crude, 120/122 M.P.	lb.	.10	@	.10¼
124/126 M.P.	lb.	.10¼	@	.10½
Whiting, commercial	cft.	1.25	@	—
Alba	cwt.	1.25	@	—
Paris, white, American	cwt.	1.50	@	1.75
English cliffstone	cwt.	1.75	@	2.75
Yellow chrome	lb.	.30	@	.35
Zinc oxide, States Brand	lb.	.10	@	—
horsehead brand	lb.	†.10	@	.10¼
selected	lb.	†.10½	@	.10¾
"XX red"	lb.	†.10	@	.10¼
French process, green seal	lb.	†.12½	@	.13¼
red seal	lb.	†.12	@	.12½
white seal	lb.	†.13	@	.13½
substitutes	ton.	35.00	@	40.00
sulphide, pure	lb	*.06	@	.07

* Nominal. † Contract prices.

Crude Rubber

NEW YORK, January 9, 1919.

The first two weeks of unrestricted trading in crude rubber have not yet furnished a sufficient clue as to the future position of this material, as the usual quiet period, following the close of the year, with inventory-taking going on in most of the rubber concerns, has prevented any decisive business which might have shaped the course of the market. Beside this aforesaid influence a generally hesitating attitude of manufacturers is noted in all branches of the industry and opinions are divided upon the time which will elapse, to pass the uncertain transitorial period from a war to a peace basis. As soon as this period will have been passed, a fair demand for crude rubber is undoubtedly in sight, but in the meantime buying is confined to urgently needed parcels and quotations in absence of any sizable buying power are more or less nominal. In general an easier trend has been noted lately in the spot position, which is nothing unusual in a period of prolonged inactivity. Larger manufacturers have apparently provided for their needs with contract shipments and buy little of spot, this accounts for the sagging tendency in spot deliveries which are quoted on the average 3c. a pound below the quotations prevailing two weeks ago. The tendency in future plantations is slightly firmer. The closing of the Far Eastern markets until January 6 has made sellers cautious, as the state of the primary market was an unknown factor. Cable service is also very irregular, and late London cables quoted first latex crepe at 26¾d, and smoked sheets ribbed at 25¾d.

The Brazilian descriptions in the domestic trading were generally inclined to softness, and offerings of spot arrivals have depressed values. Para up-river fine has been offered at 61c. and medium at 54c. The coarse grade as well as Caucho ball were quoted at 35c. Islands coarse is obtainable on the spot at 24c. and Cameta is held at 25c. In the Plantation market first latex crepe on the spot is quoted at 58 @ 58½c, and for distant futures 54½c. is asked. Smoked sheets ribbed are held at 56c. for spot and at 52½c. for futures. No change was reported in the Central grades which were quiet at 37c. for Corinto and Esmeralda.

	Spot	January-March	April-July
Para—Up-river fine	61	62	..
Up-river medium	54	54½	..
Up-river coarse	35	35½	..
Caucho ball	35	35½	..
Islands fine	53	53½	..
Islands coarse	24	23½	..
Cameta	25	24½	..
Madeira fine	66	65	..
Ceylons — Smoked sheets ribbed	56	53	52½
Smoked sheets, plain	55	52	51½
First latex pale crepe	58½	55	54½
Amber crepe	49	48	46
Clean brown crepe	50	50	49
Centrals—Corinto, prime	37	37	..
Esmeralda, prime	37	37	..
Mexican scrap	35	35	..
Balata sheets	90	..	..
Balata, block Panama	56	..	..
Guayule	35	..	..
Africans—Rio Nunez string	55	..	..
Massai, red	55	..	..
East Indian Pontianak	14	..	..
Palembang	15	..	..

Scrap Rubber

NEW YORK, Jan. 9, 1919.

True to the holiday season condition, the scrap rubber market has been very dull for the past fortnight, the movement of materials being very light.

Reclaimers at the present time have few if any large orders on hand, but most scrap men expect matters soon to liven up, for a big year is predicted for the rubber industry, and it is only reasonable to presume there will be a good demand for reclaimed stock.

Activity during the past fortnight has in the main been confined to boots and shoes. Tires have been stagnant and inner tubes very quiet and mechanicals show no improvement.

The following prices have been quoted for scrap f.o.b. the reclaiming mill:

Boots and Shoes	7.60	@	7.75
Arctics, trimmed	6.00	@	6.25
Arctics, untrimmed	5.00	@	5.25
Tires—Automobile	4.25	@	4.50
Bicycles, pneumatic	4.00	@	4.25
Mixed hose	1.25	@	1.50
Air brake	4.25	@	4.50
Inner tubes, No. 1	20.50	@	21.00
Inner tubes, No. 2	10.00	@	10.75

Shipments to the United Kingdom

The War Trade Board have been requested by the British War Mission to make the following announcement:

"The Controller of Import Restrictions, Board of Trade, London, has, with effect from December 19, 1918, dispensed with the Permit-to-Purchase system for purchases in the United States. Permits to purchase are therefore no longer required, but articles which are prohibited imports must be covered by import licenses, which can only be obtained by the consignee.

"Owing to changes being constantly made in the British Import Restricted List, the British War Mission is unable to keep exporters advised at all times and with any degree of accuracy of the articles requiring import licenses. Exporters are strongly advised, before they make shipment, to obtain from their consignees in the United Kingdom definite assurance that they have obtained an import license or have been informed by the Controller of Import Restrictions or other interested department, such as Agricultural Machinery Department, Paper Controller, etc., that an import license is not necessary. All goods shipped in contravention of import restrictions or for greater weights and values than are authorized by import licenses are subject to confiscation on arrival.

"Exporters will be in order in making shipment of goods covered by British Permits to Purchase already issued, provided the weights and values authorized are not exceeded, as import licenses for such shipments will be issued on arrival of the goods in the United Kingdom."

Applications for export licenses will no longer be referred to the British War Mission.

Revised Sample Export License

The War Trade Board announces in a new ruling (W. T. B. R. 457) that W. T. B. R. 323, issued November 23, 1918, and the Special License No. RAC-55, issued in accordance therewith, have been withdrawn, and that revised special license, under the same number (RAC-55), effective December 24, 1918, has been issued.

The revised Special Export License No. RAC-55 has been granted to the Post Office Department and to the customs service authorizing the exportation, without individual export license, of samples of any commodity and advertising matter to be used therewith, regardless of whether the same are shipped by mail (subject, however, to the postal regulations), by freight or by express, in passengers' baggage or otherwise, when destined to any country.

Under this license the term "samples" is construed to mean articles or portions thereof intended for use in soliciting orders, and is not construed to include any article or portion thereof which is itself intended to be sold as an article of commerce.

Shippers should note that it is unnecessary to apply to the War Trade Board for permission to ship under Special Export License No. RAC-55, and no special document issued by the War Trade Board is necessary in connection with such shipments. It is only necessary to note on the package, if the shipment is made through the mails, or on the export declaration, if the shipment is made by express or freight, the following: (1) "Shipped under Special Export License No. RAC-55," (2) the name and address of shipper, (3) the name and address of consignee, (4) a statement of contents.

It should further be noted that Special Export License No. RAC-55 is not a license to trade with the enemy and does not authorize any shipment in contravention of section 3 of the Trading with the Enemy Act.

The attention of exporters is called to the fact that the use of Special License No. RAC-55 does not relieve the shipper of the responsibility of complying with the import restrictions of the country of destination. In order that American exporters may appreciate the importance of informing themselves in this regard they are advised that at present the customs restrictions of the United Kingdom forbid the entry into that country, as samples, of silver, gold and real jewelry, motor cycles and auto-peds, complete motor cars and parcels of timber exceeding 50 pounds, also tobacco samples in unmanufactured form, in weights exceeding 2¼ pounds. (Tobacco samples of any size are only admitted to approved tobacco importers.) Other countries have restrictions similar to these, and it is suggested that exporters avail themselves of the facilities of the Bureau of Foreign and Domestic Commerce, of the Department of Commerce, Washington, D. C., in obtaining information respecting the customs regulations of foreign countries.

Water Power Development in France

France, until the war an importer of one-third of its coal, was faced by the loss to the enemy of a considerable proportion of its own mines and the rising price and difficulty of transportation for imported fuel. By the end of this year will have 1,100,000 H. P. developed, an increase of 450,000 H. P. since 1910.

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